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## ORIGINAL ARTICLES.

### SOME GLYCOSURIC DERMATOSES.<sup>1</sup>

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THE whole class of cutaneous eruptions, symptomatic of the presence of sugar in the urine, has been given by the French the title of *diabétides*.

If the dermatoses included under this designation were in the main pathognomonic of the underlying condition which their presence suggests, or if indeed there were sufficient characteristics to distinguish the diabetic eruptions from those of a similar nature, but of distinct etiology, the term might well take its place alongside of the syphilids, the scrofulids, the tuberculids, and the leprids.

The chief objection which I have to interpose is that many of the skin-manifestations of the sugar-disease often occur in the presence of the symptom glycosuria, which should not be confounded with the disease diabetes, and hence, as applied to these particular outbreaks, the term would be a misnomer.

It is so well known that the condition furunculosis coexists and frequently depends upon the abnormal presence of sugar in the system, that many, like myself, make it a routine practise to examine the urine in all cases showing, what we may term, the furuncular diathesis. This has, in many instances, led to the early discovery of glycosuria, and pointed out the way by which we may put an end to the otherwise persistent and obstinate complaint, *viz.*, by the reduction or possible cure of this sugar loss.

It has been claimed that in some instances, a furuncular process, having its origin in the skin, reacts upon the glycogenic functions secondarily, and is a cause rather than an effect. Whether this be so or not, we do see cases in which a glycosuria coincides with an outbreak of furuncles, and disappears when the boils cease cropping out. To my mind, both conditions here depend upon a common cause, and this cause being once removed, both manifestations naturally cease together.

<sup>1</sup> Read at the meeting of the American Dermatological Association, September 8, 1896.

I recall in this connection the following case, referred to me by Dr. W. T. Kudlich of Hoboken, N. J.:

Mr. C. was first seen by me on January 18, 1890. For several weeks the patient had had a succession of boils upon the back of the neck, followed by others upon the face. Upon examining the urine, I found it to contain a small percentage of sugar. The family history pointed to no instance of diabetes, but the personal history strongly suggested a cause for such a glycosuria, in that the patient consumed daily large quantities of champagne. The treatment consisted principally in withholding this and other sugar-bearing beverages and in ordering a rather restricted diet. The sulphid of calcium was given in dose of one-twentieth of a grain every two hours.

On January 27th, nine days after treatment was begun, all trace of sugar and all furuncles had disappeared. The patient remained under observation for a short time longer, on account of an erythematous eczema of the scalp and forehead, undoubtedly due to the same cause, and has since then remained free from any manifestations of the sugar-disease.

Carbuncle is another common skin-affection which should direct our attention to the urine.

I have at the present time under treatment a lady, who six years ago had a carbuncle on the back of the neck. The urine was not examined at that time, but there is a history of subsequent ill health which suggests that the disease diabetes had already begun at that time. About a year later, during an attack of grippe, the lady read of the death of the Khedive of Egypt, which was attributed to diabetes resulting from la grippe, and told her physician she felt sure that this was her own trouble. He examined a specimen of urine and found the patient's surmise well founded. This lady has always believed her diabetes originated from the grippe. I am equally convinced that it began at or before the time of the carbuncle and that, if looked for, sugar could have been found then, though undoubtedly the attack of grippe tended to aggravate certain symptoms already present.

Considering the voluminous literature upon diabetes in its many bearings, it must be granted that the *dermatoses diabeticæ* have not been exhaustively dealt with, and comparatively little is to be found concerning them in the text-books. It is for this reason chiefly that I wish to put on record a series of eruptions extending over several years, which have been of much interest to me and may help to draw attention to these conditions, and

aid in the final determination of the affections which are to be included in the class of glycosuric dermatoses. I was first asked to see the following case with a colleague, several years ago:

There was then present upon the chest and side of the neck a herpes closely resembling a zoster, but without marked neuralgic pain. The diabetes had already existed for about two years, and the lesions occupied, according to the patient's statement, the same locations upon which a year before there had been a number of water-blisters caused by rubbing the chest with strong ammonia. The herpetic lesions soon healed under mild treatment. About two years later the family physician having died, the patient came under my own care, and for the past three years has been seen at irregular intervals and has observed the prescribed diet and regimen with irregular persistency. The urine has contained from two to six per cent. of sugar and has had a specific gravity which varies but little from 1032.

Three years ago, when I was asked to prescribe for her, there were present upon the scalp, extensor surfaces of the arms, wrists, backs of hands, thighs, legs, and backs of feet, rounded lesions, which were, according to the patient's statement, irritable rather than itchy. As they had existed for some time, many had changed in appearance by the more or less constant picking and scratching, to which they had been subjected. The eruption, as a whole, much more closely resembled some cases of acne cachecticorum, which I had seen, than it did acne necrotica. These lesions were much more obstinate than those of acne varioliformis, but with a vigorously enforced diet and treatment directed toward the diabetes, including the use of codein, gave way after a time to the local use of ammoniated mercury ointment, which is usually so promptly efficacious in acne varioliformis. Other local antiseptic and reduction agents, such as resorcin, were occasionally employed. Such necrotic lesions, as above indicated, have continued to occur from time to time, until the body is covered with rounded, depressed, atrophic, whitish cicatrices of irregular size. New lesions are prone to develop just at the margin of some of these scars, so that the latter are becoming more and more elongated from the impinging of the new scars upon the old.

In September, 1893, at a time when the percentage of sugar was high as a result of certain liberties at table, the lady was seized with what I can best characterize as acute multiple gangrene of the skin. When I saw the lesions, which were for the most part upon the arms and legs, the epidermic slough had separated in some, while adhering in others as a grayish- or greenish-black, dry eschar, attached in its central part and loose about the edges. The ulcerated surface, which was very superficial, continued to extend at the periphery until some lesions attained the size of a quarter-dollar silver piece, rather oblong or oval,

than round. The surface had either a thin diphtheritic-like covering, or was grayish-yellow, some with the red points of the papillae showing through. The appearance of the lesions was almost identical with that of a case of acute multiple gangrene in an hysterical girl which I treated in 1890. In the latter case, however, the largest lesions reached a diameter of three or four inches, and left dollar-sized keloidal scars.

A strict diet was enforced and moderately large doses of codein were given. Improvement took place rather slowly, the patient keeping her bed for about a fortnight.

The separate lesions were painted with benzoïn in collodion, or aristol in collodion after the surface was freely dusted with aristol powder.

At the present time, while the smaller lesions simulating acne necrotica continue to appear at times upon the scalp and elsewhere, there are dark-brown pigment-marks at the site of many of the preceding gangrenous lesions, while surrounding many of the rounded pits, left by the necrotic lesions, is a pigmented areola or halo.

The appearance of the whole body at first glance is, in a slight measure, suggestive of leprosy, and without going carefully into the history, it would not be astonishing if one made a diagnosis of syphilis. There is one peculiarity of these pigmented areas to which I desire especially to call attention, and that is the marked growth of strong, dark hairs, limited abruptly to the patch in which pigment has been deposited. While much more noticeable in the irregular-sized patches corresponding to the preceding dermatitis gangrenosa, the same thing is seen to a lesser degree in the pigmented rings surrounding the cicatrices, due to the necrotic dermatitis, and which are themselves pigment-free. Upon the backs of the wrists and forearms, the contrast between these hair-bearing pigment-areas and the whiteness of the surrounding skin suggests vitiligo. The resemblance is, however, due more to an optical delusion than to reality. And this brings me to speak of bronzing of the skin in diabetics as a condition *per se*, and not secondary to other lesions.

This melanoderma is usually seen in cases of progressive cachexia, which run a comparatively short course. The urine does not seem to differ in general characteristics, or in its sugar-content, from that of non-pigmented cases, and Dr. Auscher failed in his attempt to discover that it contained pigment. Many of the symptoms are severe, and dyspeptic manifestations with dryness of the tongue and inflammation of the jaws are apt to be much more pronounced than in ordinary cases. Here there is no suggestion of vitiligo, but, on



the contrary, the skin is uniformly darkened, showing however more especially upon the exposed surfaces and about the genitals. Dr. Dutournier<sup>1</sup> likens the color to a leaden hue, or blackish-gray, with a certain metallic luster. The period at which this cutaneous pigmentation appears is ill-defined, coming on, as it does, in a slow and gradual manner. Toward the final stages of the disease, according to Dr. Dutournier, it may either become more marked on the sites of predilection mentioned, or, on the contrary, it disappears to make place for a grayish color resembling that of the skin of uncleanly individuals. Until recently it was held that in the bronzing of diabetics the mucous surfaces escaped, and that pigmentations in the mouth pointed rather to the disease of Addison. Professor Mossé, however, in 1894,<sup>2</sup> demonstrated faint pigmentations upon the inner surfaces of the cheek and lip of a diabetic subject.

Aside from Addison's disease, we have to distinguish diabetic pigmentation from that caused by the prolonged use of silver and arsenic, as well as from that which is consecutive to prolonged cutaneous irritation, such as one sees in inveterate phthiriasis, and from certain atypical instances of icterus.

Erysipelas, which is among the more unusual dermatological complications of diabetes, may be the means of hastening the fatal termination as illustrated by a case brought into my service at the City Hospital, on February 19, 1894.

The patient was a man of forty-four years, who weighed 350 pounds, and had been transferred from one of the hospitals in the city. Presumably because of a history of specific infection, dating back some twenty years, and possibly from the supposed specific nature of the lesions which were present at the time upon the skin surface, he was admitted to the syphilitic ward. Here it was discovered that the urine contained a very high percentage of sugar, being virtually "loaded with sugar," as the history recorded it—a discovery which, so far as we could judge, had not been made before. One month previous to admission the patient went through an attack of erysipelas, to which he attributed his present condition. Ten days before entering the hospital, and some time after the erysipelatous process had ceased to manifest its presence, abscesses began to develop upon the back and arms. These lesions became very painful, and caused extensive destruction of tissue, so that a probe could be passed five inches into the fatty tissues of the back, perpendicularly to the surface. An antidiabetic regimen was ordered and appropriate local dressings were made,

but the already advanced sloughing of tissue became daily greater and the patient's condition more alarming, new abscesses forming rapidly on various regions of the cutaneous surface. On or about March 10th the erysipelas recurred, spreading rapidly from one region to another, until the face and head became involved. On March 14th, coma developed, and in this state the patient died on the following day, less than a month from the date of his admission. Such a history teaches us among other things, that syphilis may be followed by glycosuria. Cases have been reported by Dr. E. D. Fisher of this city, in which diabetic symptoms followed syphilis, and disappeared under antisyphilitic treatment.<sup>3</sup>

Dr. Feinberg<sup>4</sup> has made similar observations. Personally, I do not recall a case developing sufficiently near the time of infection to make syphilis a positive etiological factor, though I have seen diabetes insipidus follow in the train of syphilitic manifestations, and have now such a case under observation. While gangrenous and sloughing tissues may, by absorption from the products of disintegration, give rise to glycosuria and multiple abscess, I doubt whether this was the case in the instance just described, not only from the rapidly fatal ending, but because we know how prone diabetes is to attack such extremely obese subjects.

Nail-affections occur with comparative frequency in diabetes, just as they do in syphilis and leprosy. Paronychias are quite common in their acute suppurative form. Small pus-collections develop along the lateral margins or in the nail-fold, and extend beneath the nail-body, unless they are opened and treated early. These may occur in any stage, but often indicate a high percentage of sugar, especially when one finger after another becomes affected. Spontaneous hemorrhage may take place beneath the nail, perhaps raising it from its bed and ultimately resulting in its being cast off.

Following suppurative inflammation in the nail-region, papillomatous growths of a wart-like nature may occur. Kaposi speaks of warty protuberances following ulcerative lesions of the skin. The term *papillomatosis diabetica* which he employs is, I think, a good one, directing attention, as it does, to this tendency in some cases.

Zoster was thought by Vergely<sup>5</sup> to be frequently caused by diabetes. Aside from the case I have briefly referred to, I have no personal experience to offer, but in this connection Hardaway's case of zoster-like xanthoma, in which sugar was present, is interesting.

<sup>1</sup> *Revue Internationale de Méd. et de Chir.*, March 10, 1896.

<sup>2</sup> *Comptes rendus du Congrès de Lyon.*

<sup>3</sup> *The Journal of Nervous and Mental Diseases*, July, 1892.

<sup>4</sup> *Berliner klin. Wochenschr.*, No. 6, 1892.

<sup>5</sup> *Le Progrès Médical*, September 26, 1891.

Pruritus, and especially pruritus vulvæ, has claimed more attention than any other skin-affection connected with diabetes, because of its almost constant occurrence at some stage of the disease, and particularly because of its severity and the slight effect of usual antipruritics, unless the cause is discovered and the disease itself is attacked with vigorous remedies.

Undoubtedly the fungus (*Saccharomyces cerevisia*) deposited from the voided urine about the prepuce in the male and the labia in the female, produces by a local irritant action not only a pruritus of these parts, but dermatitis and eczema, which may lead to gangrene. Hence cleanliness and bathing after each urination are advisable. Once a raw surface is established, it would seem that we need no longer invoke the local deposit of sugar from the urine to account for persistent itchiness, since it has been shown by Vergely that in 190 cubic centimeters of fluid collected from the surface of an ulcer, situated upon an edematous limb, 2.25 grams of sugar were present.

In treating these cases it is found that a lotion which acts in a satisfactory manner in one case fails in another. I have seen diluted listerin stop the distressing pruritus after carbolic and menthol solutions and various ointments had produced little effect. Solutions of peroxid of hydrogen, permanganate of potash, hyposulphite of soda, etc., act well in certain cases. In others the physician must himself apply solutions of nitrate of silver or strong solutions of permanganate. The itching may extend into the vagina, in which case the hyposulphate solution ( $\frac{1}{2}$  ss to Oj) or permanganate (gr. xv to Oj) may be injected. Lotio nigra does well in some instances, while in others distilled extract of hamamelis is all that is required. What I have said in speaking of boils and multiple abscesses I can repeat for pruritus pudendi. Let it always lead you to examine for sugar quite as much as would a high specific gravity of the urine. Eczema and psoriasis occurring in diabetics are usually only incidental, still I am convinced that certain eczemas develop solely because of the glycemia. An acutely developing moist eczema of the lower extremities in stout individuals has led me more than once to suspect glycosuria, which was confirmed on testing. While pruritus, as I have said, is the most likely of all cutaneous complications to occur, xanthoma diabeticorum is the dermatosis most intimately associated in our minds with the disease, although up to 1893 but thirteen cases had been put on record, which have since been increased to thirty. Some observers maintain that the con-

dition is not a xanthoma at all, and the term lichen diabeticus has been applied to it. It surely does not seem to bear a very close clinical relationship to the xanthoma usually seen about the eyelids, occurring as the former does, acutely over a large extent of surface and, perhaps, disappearing spontaneously after a brief period which the latter is never known to do. The lesions are papular or tubercular, less yellow, firmer, inflammatory, and occasion subjective symptoms. That it resembles but slightly xanthoma planum is shown by the fact that Dr. Robinson's case, which so far as I can remember was the only one observed in this country up to that time (1889), was originally presented at the New York Dermatological Society as a case of fibroma cutis.

A most interesting and instructive case, in this connection, is that depicted and described in the "Pictorial Atlas of Skin Diseases," now being published from the models in the St. Louis Hospital of Paris. The case belonged to Dr. Darier, and showed abundant lesions of xanthoma planum and tuberosum in a glycosuric, ictric, and obese subject.

Here, alongside of such lesions as all are familiar with in ordinary xanthoma, there occurred papular and tubercular lesions, corresponding in clinical features to those of so-called xanthoma diabeticum.

In our present lack of knowledge not only concerning the pathogeny of diabetes, but likewise in regard to the connection between hepatic diseases and the occurrence of xanthoma, the present instance which is unique, so far as I know, of a combination of all the features going to make up two hitherto distinct, but in many regards similar, conditions, is, it seems to me, of the greatest interest and importance.

Besides the dermatoses above mentioned, we find, occasionally, in diabetes, malum perforans pedis, deep or perforating ulceration of the plantar surface of the ball of the foot or toe, chronic urticaria, pityriasis rubra (case reported by Horden, *Lancet*, vol. ii, p. 1056, 1893), and others.

The skin in diabetes is habitually dry. I have one patient who complains very much of burning of the footsoles. The skin, too, would seem to be peculiarly vulnerable, healing badly after injury, showing a tendency to sloughing and eschar-formation. It is also apparently in a more or less constant state of receptivity for pus-producing organisms, all of which may be explained by the presence of sugar in the tissues which is possibly excreted by the cutaneous glands. A feature of excoriated or superficially ulcerated lesions is that



they become quickly glazed over or covered with a coating within a remarkably short time, and still show but little tendency to spontaneous healing.

Another noticeable peculiarity is the central necrosis or central gangrene common to many lesions, and, as shown in one of the cases I have reported, there is a tendency to persistent recurrence of lesions at the margin of the scars left by former ones.

While I have not attempted to treat the subject exhaustively, I think enough has been said to indicate my belief that glycosuria, as a symptom of a variety of conditions originating in different parts of the body and still far from being understood, may be attended with a great variety of cutaneous manifestations; that while these dermatoses are at times almost sufficient of themselves to lead to the diagnosis of the presence of sugar in the urine, we know as yet of but few which are sufficiently pathognomonic or peculiar to the disease diabetes to warrant our making of them a class to be called diabetids; that if such a class is to be established, the diabetic pigmentation, the dermatitis gangrenosa, and dermatitis necrotica diabetorum, of which I have related instances, should find a place in it alongside of xanthoma diabetorum.

#### LATENT MASTOID DISEASE.<sup>1</sup>

By EDWARD FRIDENBERG, M.D.,  
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IN the great majority of cases the diagnosis of mastoid disease is made without much difficulty; pain, tenderness on pressure, redness and swelling of the integuments, fever and prolapse of the posterior-superior wall of the auditory canal are the leading symptoms in acute cases, while persistence of fistulous tracts, or recurrent edema, characterize those of a more chronic nature. Yet there are not a few instances in which extensive mastoid disease is overlooked, or not even suspected, owing to the entire absence of symptoms, either local or constitutional.

To illustrate some of the forms of what may be properly termed "latent mastoid disease," I shall briefly narrate a few typical cases of the large number I have seen and treated:

CASE I.—K. C., a girl of nineteen, was admitted to the German Hospital on August 30, 1891. A year previously, after a severe cold in the head, she had pain in the left ear, followed by discharge, at first bloody and serous; later, purulent. Pain soon disappeared. The discharge per-

sisted for a time, and then ceased. Since then there has been occasional discharge, at no time very profuse, at no time foul-smelling. Hearing, however, has diminished considerably, and later a feeling of pressure was noticed in the ear, for which symptoms the patient sought relief. Patient was a healthy, well-nourished girl; family history and antecedents good. The right ear was normal. In the left ear the hearing was: Ordinary voice, 1 meter; whispering voice, 2 meters; watch, .03 of a meter; Rinné negative; bone-conduction to the left. Inspection showed auditory canal blocked by large polypus; mastoid region normal in all respects. Examination of heart, urine, and lungs was negative.

After thorough cocaineization of the polypus, it was removed by the snare. Hemorrhage was free, but was easily controlled. Warm antiseptic irrigations were ordered three times a day. On the following day, violent inflammation of the mastoid had set in, with much swelling and redness of the integuments, and a temperature of 102½°. An ice-bag having been used for about forty-eight hours, without any improvement in the patient's condition, operation was determined upon. On September 2d the mastoid was opened. The periosteum was found slightly thickened and much inflamed; the lateral wall of the mastoid, a mere shell—at most 2 millimeters in thickness; the cells entirely broken down, forming a large cavity with carious walls, filled with pus and granulation-tissue, communicating freely with the antrum and middle ear.

Here was a case in which carious destruction had been going on within the mastoid, probably since the attack of acute middle-ear suppuration one year ago—certainly for several months. At no time had there been symptoms pointing to implication of the cells, and two days before the operation a careful examination had failed to detect anything abnormal about the process. The patient recovered promptly.

CASE II.—E. J., man, forty years of age, was referred to me for a persistent suppuration of the right middle ear, which had resisted routine treatment at the hands of his family physician for five weeks. At the onset of the acute middle-ear suppuration there had been slight pain and tenderness over the mastoid, but not more than is usually found in acute otitis media suppurativa. These symptoms disappeared under the use of hot poultices and syringing with hot boric-acid solution. The examination revealed nothing of importance, excepting an unusually profuse, non-odorous, purulent discharge, the pus being of a light yellow hue, and perhaps a little thinner than is usual. For six weeks the most varied treatment was resorted to: Constant syringing with warm aseptic saline solutions; peroxid of hydrogen, astringent and antiseptic instillations; washing out through the Eustachian tube. All failed

<sup>1</sup> Read at the twelfth annual meeting of the Fifth District Branch of the New York State Medical Association, held in Brooklyn on May 26, 1896.

to reduce the amount or alter the character of the discharge. In spite of the absence of the usual symptoms relied upon for the diagnosis of mastoid trouble, I came to the conclusion that such an amount of pus could not be secreted by so small a cavity as the *cavum tympani* and that we had to deal with an empyema of the mastoid process. With some difficulty the patient was induced to submit to an operation, which revealed a condition very similar to, but even more pronounced than, the one noted in our first case, viz.: Extremely thin-walled mastoid; an enormous cavity, which had already destroyed the median wall of the process, for, upon attempting to remove the last vestiges of granulation-tissue with a sharp spoon, a sudden, extremely profuse flow of dark venous blood alarmed the operator and almost jeopardized the life of the patient. In an instant many ounces of blood were lost. As soon as the danger was realized, the index finger was pressed upon the lacerated lateral sinus and the bleeding at once stopped. The assistants tied the arteries, put in sutures above and below, and completed the toilet of the wound. A compress of iodoform gauze was quickly substituted for the finger, the cavity stuffed with sublimate gauze, and pressure-bandage applied. For a week the wound was dressed without disturbing the iodoform-gauze pledget over the tear in the sinus. On its final removal, the sinus was found healed and its wall covered with healthy granulations. Convalescence was slow, but uneventful.

In this case also the acute caries of the mastoid cells must have been coincident with the first signs of middle-ear trouble; and had operative interference been still further postponed, sinus-phlebitis and pyemia would have surely resulted, perhaps with a fatal termination.

CASE III.—A. L., man, age twenty, was admitted on July 2, 1888, to the German Hospital, for recurrent febrile attacks, with slight chills. The attacks occurred at irregular intervals of from two to five days, reaching  $104\frac{1}{2}^{\circ}$  in a few hours, being followed by rapid defervescence and some perspiration. In the intervals the patient was afebrile and in fairly good condition. The spleen was slightly enlarged, and the patient was treated for malaria without marked improvement. As his right ear had discharged since childhood, I was requested to examine the case. I was unable to discover anything but a chronic suppurative otitis media, with inspissated, fetid pus, after the removal of which the membrane and all the ossicles were found to be absent. The mastoid was apparently healthy, but I suspected septicemia from retention of decomposing discharges, and ordered the usual treatment.

While considering the advisability of opening the mastoid for the purpose of thorough drainage, sudden, acute, painful swelling over this bone made the diagnosis more clear and led to immediate operation. We found subperiosteal abscess,

communicating by a small perforation near the tip, with a very large, smooth-walled cavity in the mastoid, filled with cholesteatomatous masses and cheesy pus, on the removal of which the hole in the bone easily contained ten grams of fluid. There was free communication with the antrum, and thorough disinfection of all the parts was easily secured. The walls of the cavity were scraped, and the wound healed gradually, with a deep, indrawn scar. Symptoms of septicemia, however, persisted for some time. The right shoulder-joint became swollen and painful. Lobular pneumonia of thrombotic or pyemic origin developed. It was four months before the patient could be discharged cured.

CASE IV.—F. W., girl of eighteen, seen by me in consultation for severe vertigo and nausea, which had come on suddenly and had lasted about three days when I was called. I had known this young woman eight years, had prescribed glasses for her and examined her ears once or twice during this time. When five years of age she passed through a severe attack of scarlet fever, with otitis media, the purulent inflammation sweeping away the drumhead and all the ossicles on both sides. When I first examined her, I found her extremely deaf, the wall of the tympanum being almost completely covered with epidermis, and merely moistened by a minute amount of pus, which was not fetid. The patient wore artificial drumheads, which materially increased her hearing power, and had always been a subject of interest to me, as I had found very few patients benefited by these contrivances. During all these eight years there had been no aural symptoms. The vertigo was very marked whenever the patient attempted to rise or moved her head quickly, the patient falling toward left side. It was followed by slight nausea, which became more marked if the motion continued. The family physician had excluded the possibility of any etiological factor but an affection of the brain or ear. Both ears showed absence of drumhead and ossicles, and dry, bony walls of the *cavum tympani*, but the mastoid appeared to be normal.

An examination of the eye was made, with negative result. The case was treated expectantly for two days, when slight pain was experienced and tenderness upon pressure observed in the neck just below the left mastoid process. On consultation, we determined to open the left mastoid. This being done at the customary site, the bone was found very hard and sclerosed. At a depth of 12 millimeters a cholesteatoma was found in a cavity about the size of a lead-pencil and about 6 millimeters deep, running inward toward the semicircular canals.

The patient made a good recovery, all symptoms abating materially at once. Slight vertigo, however, persisted on rapid movement for about two months. The bony cavity and the artificial hole in the mastoid became closed throughout by bone.

In this case it would be difficult to fix the time



at which the mastoid disease commenced, but I believe we are safe in presuming that it had lasted several years.

As above stated, these cases are merely types, and I have observed quite a number resembling one or the other more or less closely. In all these cases, disease of the mastoid, acute or chronic, produces a great destruction within the bone, symptoms not arising until the pathological process approaches or reaches the meninges or the semicircular canals on the one hand, or the periosteum on the other. And the lesson which they teach is: That in any case in which purulent discharge from the middle ear continues, or extensive carious destruction of the contents and walls of the tympanic cavity exists or has existed at any time, latent mastoid disease should be considered as a possibility and guarded against.

#### DISCUSSION.

DR. J. E. SHEPPARD: Some symptom has always existed in those cases that I have seen sufficient for a probable diagnosis of mastoiditis. Among the cases I remember are two or three—several, perhaps—where the only possible indication for operation was a profuse purulent discharge, continued over too great a length of time for a simple acute middle-ear suppuration. I have repeatedly opened the mastoid and found pus in larger or smaller quantities when there was not any discharge from the tympanic cavity. In other cases the only symptom present indicating trouble was pain, which was not located in the mastoid at all, but over some other portion of the affected half of the head. At other times there has been no pain present, but slight tenderness over the mastoid—so slight it could only be elicited by very firm pressure or percussion.

The history of one of my cases emphasizes the importance of one of the symptoms of which Dr. Fridenberg spoke, and that is the drooping of the posterior-superior canal-wall.

The patient was a man thirty-five years old. Two years before he had a simple recurrent middle-ear suppuration, which rapidly recovered. At the last attack, he came with what was apparently a similar recurrent middle-ear suppuration. He had considerable pain in the mastoid region, with tenderness, which, with the usual abortive measures, subsided. He had no discharge from the ear after about two weeks of treatment, no pain, no tenderness over the mastoid; the only symptom left was the drooping of the posterior-superior wall of the canal, which seemed no more than usually sensitive. The man re-

turned to his work, and I was about ready to discharge him as cured. I told him, however, as a precautionary measure, to come back for a final visit in a few days. About two days after this he came to me in great haste, saying that he had been seized during the preceding night with severe pain, fever, and vomiting. I operated the same day. I found a little granulation-tissue and pus in the mastoid antrum; practically no pus in the tympanic cavity, but a carious canal leading from the upper portion of the tympanic cavity, the so-called attic into the brain cavity. Undoubtedly he had had a suppurative process going on in the mastoid antrum and tympanic attic all the time, even though his symptoms had subsided so entirely. This process had extended through the roof of the tympanum and set up a meningitis, which caused the man's death, simply because I had not learned to realize the importance of this one symptom. I had never seen in the books nor heard the statement made that drooping of the posterior-superior canal-wall, when attended by absolutely no other symptoms, was a sufficient indication for operation.

DR. MATHEWSON said that it is somewhat difficult to get comparative statements as to the number of cases relieved by operations on the mastoid, as compared with those which were not treated by operative procedure—at least not by removal or chiseling away of the bone.

He has sometimes thought, too, that the mastoid got blamed for deaths that it was not quite responsible for, because in a number of cases of *post-mortem* examinations he has seen, the mastoid was not found to be the cause of the trouble. The brain-abscess or meningitis had not originated in the mastoid, and there was no mastoiditis to account for the death.

DR. ALDERTON of Brooklyn said that any bulging of the posterior bony wall of the canal, even so far out as the bony orifice, in connection with tenderness and other symptoms involving the mastoid, was a pronounced indication for operation, and cited a case in which the bulging had been confined to the inferior-posterior wall, just at the orifice of the bony canal.

DR. FRIDENBERG: The gentlemen who have been kind enough to discuss my paper are all evidently in agreement with me on the essential points which I brought forward. Knowing that I was to address a meeting composed principally of general practitioners, I had tried to emphasize this point: That, as a rule, when we operate for mastoid disease, I should say, perhaps, in ten per cent. of the cases, it has lasted a long time with-

out our knowing it, and in ninety per cent. it has been there, but not reached the point where operation was necessary. But almost every aural surgeon is surprised each time he operates at the great amount of destruction he finds already present.

### FUNCTIONAL INDIGESTION, ITS CAUSES AND TREATMENT.<sup>1</sup>

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THE term indigestion refers to a condition, not a disease; this disturbance, then, is always functional. The use of the word "functional" in the title of this paper is to direct attention to those indigestions which are in no way connected with any organic lesion of the stomach. Hence the cases which occur in cancer, acute and chronic gastritis, ulcer, and other lesions are eliminated from our discussion; likewise dyspepsia with its exacerbations, which accompanies atrophy of the stomach and cicatrices following ulcer, does not come within the limits of this paper. Cases of indigestion due to diseases in other parts of the body are classified here, as are also those caused by mental or emotional impressions. An indigestion arising from a neurosis is functional in the sense here assigned to that term. To understand these views, it is necessary further to differentiate indigestion from dyspepsia. We use the term indigestion to indicate a brief, single attack of derangement of digestion, while dyspepsia refers to a pathological, perhaps chronic, condition, which encourages or allows a number of attacks of slight or severe gastric or intestinal digestive disturbance, occurring in succession, and often covering considerable time.

Thus limiting our discussion, it may be observed that this form of indigestion is caused by (1) some indiscretion in diet; (2) some irregularity in the time or manner of taking food or drink; (3) some bacterial effect upon the food; (4) some neurosis or reflex disturbance, or (5) some sudden mental or emotional impression.

1. Indiscretions in diet include failures in preparing food properly, as well as the selection of proper quality and quantity. Idiosyncrasies prevail, which, if disregarded, frequently precipitate an attack of indigestion. In cases of anemia and exhausting diseases, the reduced power of the stomach may allow an indigestion to occur after taking food which, under normal circumstances, agrees perfectly. At such times,

the secretion of gastric juice is diminished on account of the altered condition of the blood; the peptic glands do not receive the stimulus which normal blood gives them, and the supply of blood is reduced so low that with normal activity they still would be unable to secrete a normal gastric juice. If under such circumstances a full meal is taken, or a diet chosen which requires greater digestive power than the stomach possesses, indigestion is the result. Attacks of indigestion are precipitated in cases of dyspepsia when the patient has been thinking so steadily that the stomach is deprived of a full supply of blood, especially do these occur if the individual returns at once to his work, not allowing time for digestion to be well started before the brain withdraws the gastric blood-supply. The headaches resulting at such times do not indicate brain-exhaustion, but stomach-exhaustion. The gastric secretion is diminished, just as in anemic cases. The "nervous" or "bilious" headaches of business men frequently are indications of indigestion of this variety, and illustrate one very prominent class of cases of functional dyspepsia. A predigested or mixed diet on days when patients need to work hard, will often remove the tendency to these attacks.

2. Physicians and others who cannot or do not have meals at regular hours, frequently suffer with indigestion caused by such irregularity. The derangements due to rapid eating are well known. The checking of gastric secretion by drinking cold or iced water is detrimental in cases of diminished secretion or impaired tonicity, except when taken at such an hour as will cause the reaction to appear when food is taken. In cases of hypersecretion of gastric juice, cold drinks with meals do little if any harm, provided the food consists mainly of proteids; but if the food consists mainly of starches or sugars, drinks with meals are objectionable. Idiosyncrasies prevail here, however, as in other cases, and sometimes the dilution of the gastric contents, by large draughts of liquid, interferes with digestion of the proteids likewise, at least delaying the process, whether the drink be cold or hot.

3. A very prominent cause of indigestion is the presence in the stomach or bowels of bacteria or their products. *Sarcinae*, the *Bacillus lacticus*, *B. butyricus*, and other bacteria, readily inaugurate fermentative processes in the stomach under circumstances of diminished tonicity or indiscretions in diet. The gases and other products of these agents may cause pain and other disturbances in the intestines with diarrhea, etc.

<sup>1</sup> Read before the Illinois State Medical Society, May, 1896.



4. In the course of ataxia and other nervous diseases, the occasional effect upon the vasomotor system is such as to interfere with gastric secretion and precipitate an indigestion. This encourages the development of bacterial operations and products. Gastrodynia, gastralgia, or neuralgia of the stomach, may interfere with digestion, and induce conditions which may develop favorable culture-media for bacteria, and precipitate an attack of indigestion. The severe pains of renal colic, or an attack of gall-stones, may cause similar functional disturbances with deranged digestion.

5. Finally, a very common cause of indigestion in stomachs where no organic lesion exists, where the food is proper, and mastication well performed, is the sudden impression made upon the nervous system by some profound disturbance to the emotions. Fear, anger, grief, surprise, intense or anxious thought, may interfere with digestion. The temporary shock to the vasomotor system which causes constriction of the arterioles of the stomach, impedes secretion of the fluids necessary for the process of digestion, and here again the growth of bacteria is encouraged.

The following indications may be regarded as pointing out the course of correct treatment in these cases, to be varied to meet the necessities of individual patients: (1) Remove the cause; (2) check or prevent the growth of bacteria; (3) assist digestion; (4) repair damages done.

1. If improper food is the cause, it should be immediately corrected; if food remains in the stomach it should be immediately removed by emesis or lavage. Nothing can be done in many cases until the stomach is empty. If some disturbance of the vasomotor system is the cause of the indigestion, the administration of nervines to quiet the general nervous symptoms, and nitroglycerin to dilate the capillaries, and allow the blood to flow freely to the stomach and increase the secretion of gastric juice, will yield excellent results. The reasonableness of this treatment is readily seen. Nervous shock—a fright, sudden anger, grief—by its stimulation of the vaso-constrictors or paralyzing effect upon the vaso-dilators, prevents the flow of blood about the peptic glands in sufficient quantity to permit a normal production of hydrochloric acid. A deficiency of hydrochloric acid in the gastric juice, even when temporary, causes at least three abnormal effects: (a) A failure to digest proteids; (b) it permits putrefactive changes in the food; (c) by failing to excite peristalsis it allows the food to remain too

long in the stomach. The occurrence of these facts make a fourth undeniable in most, if not in all, cases, *vis.*: The formation of a favorable culture-medium for bacteria.

If the nervous impression is not too great, and there is only a reduction of the normal amount of hydrochloric acid—not a complete checking—the administration of pepsin and hydrochloric acid may be sufficient to overcome the paroxysm. They assist in the digestion of excess of food, and in case of the presence of organisms they serve another purpose. They help to restore the gastric juice to its normal condition, and then enable the stomach to repel the invaders.

2. The indication is to prevent or check the development of bacteria. The rational course to pursue, and one which should be borne in mind from the beginning, is to aid the natural forces, as already pointed out, by trying to restore the normal secretions. Very frequently the urgency of these cases is so great, however, that more rapid and positive methods must be adopted. If the stomach has been emptied, and frequently when it has not, the use of antiseptics, like carbolic acid, salicylate of bismuth, or salol, will give quick and grateful relief. Cases of gastrodynia may frequently be relieved in this manner. I am now treating a patient with nephrolithiasis who has occasional attacks of gastrodynia, due apparently, to an accumulation or formation of gas in the stomach, caused by indigestion. The most successful treatment of this case has been three-grain doses of salol, from four to eight times a day. When the abdomen is tense and the pain in the stomach severe, three or four doses of the salol relieve the patient entirely, leaving the abdomen soft and normal. In similar cases of gaseous distention accompanying or following indigestion in children, I have used salicylate of bismuth with marked success. I have used carbolic acid in hundreds of cases for gaseous distention with very gratifying results. Resorcin is milder, and does well in many cases. Gelsemium may be given with any of the antiseptics above mentioned for its soothing effect upon the gastric mucous membrane, and for its anodyne influence upon the nerve-terminations in that membrane.

A very important part of the treatment of these cases is required to overcome the results of the presence of bacteria and their products. The pain in the stomach or bowels caused by the irritating gases, remains of undigested food, etc., may require anodynes; and the headache, caused by the absorption into the blood of bacterial alkaloids, may require the bromids and other nerve-

sedatives until the blood can be changed or the poisons eliminated. Diarrhea is a very common result, but one which can usually be controlled by antiseptics; if particles of undigested material remain in the intestine, they should be removed by a cathartic. To produce catharsis and at the same time act as an antiseptic, calomel is pre-eminent, and may be given in doses of one-tenth of a grain with bicarbonate of soda, one grain, every hour or two for adults, and every two or three hours for children. Half of this dose acts well for infants under one year. For simple antiseptics, salol, salicylate of bismuth, boric acid, carbolic acid, and resorcin frequently do good service. Salicylate of bismuth, salol, and resorcin, in one- or two-grain doses every two or three hours for children, will often give most satisfactory results; smaller doses should be given to infants, and larger to adults.

3. The digestion requires assistance very often on account of some weakened condition of the system, as in convalescence from acute diseases, or because of an excess of food. It is necessary to recall the digestive ferments, and their specific action at such a time in order that assistance may be intelligently rendered. The administration of diastase and pancreatin, when non-nitrogenous foods are imperfectly digested, is sometimes followed by excellent results. Hydrochloric acid and pepsin often act quickly and hasten the digestion of nitrogenous foods. When the digestion of both classes of food is at fault, peptenzyme not infrequently gives relief. Ipecac in six- or eight-grain doses, three times a day, increases the biliary secretion.

4. The fourth indication seldom requires attention except in these debilitated cases, and where the offending materials have remained in the alimentary canal an unusual time. In the former case, tonic and corrective treatment may be required. Lactopeptin and phosphates will be found especially serviceable. Malt often is useful. The elixir of pepsin with aromatic sulphuric acid assists digestion, stimulates the secretions of the stomach, the liver, the pancreas, and probably the intestines. When the undigested materials have remained unusually long in the bowels, antiseptics will be required in addition.

It will have been observed that the writer emphasizes the importance of antiseptics in the treatment of functional indigestion, as he has elsewhere done in the treatment of dyspepsia. It is more essential in dyspepsia, but it is important in indigestion.

## THE BUSINESS END OF IT.<sup>1</sup>

BY GEORGE W. MILES, A.M., M.D.,  
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THE presentation of formal papers at stated meetings of the members of our profession, thereby affording opportunity for discussion and comparison of notes, is conceded to be a custom furnishing to us all both pleasure and profit. I have thought best, however, to speak of a matter which I feel sure is of more than passing interest to all of us and of decidedly practical importance.

While the profession of medicine is an ancient and honorable one; while its study and practise are of entertaining and engrossing interest; while there is no nobler field for earnest study and excellent effort; while it furnishes unlimited opportunity for kindly words and charitable deeds; while it is the one occupation of all others to call out the best of our moral natures as we administer to human suffering; while we may and should take pride in our calling, and as we pursue our busy way delight to do good to all men; while we love to believe that our life-work is placed on a plane even beside that of those who preach the Gospel of Christ; and while it may almost seem a sacrilege to ask you, even briefly, to withdraw your minds from considerations so high, so noble, so beneficent, still I feel it is the truth to say that so far as most of us are concerned, at least, we must support ourselves and our families by our labors, and the question therefore becomes an important and a practical one, "How much is there in it?" I hope I may not be thought mercenary, then, if I give some consideration to-day to the matter of the kind of pecuniary harvest one may gather after a lifetime of toil in the medical profession.

The statement admits of no questioning, I think, that doctors, as a class, are far from being rich men. In proportion to the capital invested in money expended for education, in culture, in hard work, in skill, in experience, there is no class or business, considered as a business, so poorly paid as ours. A recent writer says: "Physicians are generally admitted to be poor financiers. There is probably no class of men who realize so little financially from their labors. Persons are often astonished to learn in how straitened circumstances many physicians, who were known to have had large practises, leave their families at death. They live moderately, indulge in no luxuries, yet after all debts are paid there is left to the family, probably, only a very humble home, and that with a mortgage upon it."

<sup>1</sup> Read at the meeting of the Third District Branch of the New York State Medical Association, held at Auburn, N. Y., June 11, 1896.



This is a picture which is not overdrawn. The large accumulations of wealth resulting from transactions in the commercial world, are unknown in the medical profession. Occasionally a physician has met with goodly returns from wise investments, and the beginnings for such investments may have been earned in the profession, but riches attained solely in and by the practise of medicine I do not believe to be possible in these days, outside of a few of the specialties in the larger cities. One of the large New York dailies has recently published a comprehensive list of the millionaires of this country, and in that list is not to be found the name of one practising physician.

Even a comparison of fees with those of other professions is not advantageous to our own. In the village of my home, not long since, a practising attorney collected a bill for a client of \$500, and for that service charged and received a fee of \$125. But a physician in the same neighborhood, having rendered some service far above and beyond any valuation, perchance where human life itself hung in the balance, is told, when he presents his bill of \$1 per visit, that it is too much, and that the physician who preceded him in attendance upon the family never charged more than 75 cents. This is another picture which is not overdrawn, either; in fact, it has even actually happened in the experience of the writer. With such a remarkable inconsistency in the matter of fees between the professions of law and medicine, it becomes at once apparent that there is something wrong somewhere—something needful to be remedied.

There are probably more factors than one entering into the condition which render the profession of medicine a poorly paid one. There is the fact of the extremely crowded ranks of the profession; also the fact that we are all probably very virtuously trying to live up to the teachings of the medical code of ethics, and although its principles are lofty and honorable, it certainly deals a rather severe blow to all aspirations for money-getting. Then there is the large amount of charity work which we must all do—the care of the sick and suffering among the Lord's poor (and it should fill us with gratitude when we stop to think that there are those even poorer than the doctors). Such charity services we should not and do not shrink from. It may not be the fault of the poor that they are poor, nor is it ours that we must serve them. There is the other class, though, the Devil's poor, or "dead beats;" and the fact that so much of our precious time is given up to them for nothing is, I believe, decidedly our own

fault. It will be well with us all when with this class of patients we shall invariably adopt the custom of declining with thanks their entire business.

Again, there are the necessarily enormous expenses of professional life. Also, there is the competition of the public hospital and the private hospital, thoroughly advertised (within the code, of course), and the free dispensaries. Once again, there is the common practise which exists among all men, and women too, of passing around among their relatives, friends, and neighbors the prescription which some poor doctor has received only one very modest fee for. But this brings us to another subject, one worthy of an essay all by itself—to dispense or not to dispense; whether 'tis better to bear the ills we already have and go on writing prescriptions, by means of which the doctor shall grow poorer and the druggist richer every year, or to write not at all. Upon this special discussion I do not desire at this time to enter.

Some of these matters which help to make the average medical income weigh lightly in the financial balance, we may not be able to remedy. There is, however, one thing which physicians can do and which, as a matter of fact, I think they sadly neglect. I refer to the application of prompt business methods in the collection of their accounts. The nearer the doctor's bill is brought to a cash-transaction and -basis, the better, not only for the doctor, but the debtor as well. An absolute cash-basis for doctors' bills may partake too much of the millennium to be practicable in everyday life, but it is certainly true that we need not allow the pendulum to swing to the other extreme and permit the physician's account to become the most distinctive credit-system in all the world; and that I believe it is to-day.

Something may be done by physicians, individually and collectively, in the protection of their financial interests. Doctors are proverbially poor collectors. They are pressed for time, it is true, but nothing is or can be of more importance to them than their bookkeeping, and it should be carefully and methodically done, instead of delaying it until odd times and thereby embarrassing many individuals who would pay, but whose lives are too short, or their residence in any given place not sufficiently extended, to meet the requirements of the slow bookkeeping which many physicians indulge in.

Doctors' bills are not presented with sufficient frequency. There seems to be an idea prevalent in my own immediate neighborhood, and I pre-

sume elsewhere, that it is not genteel to present a doctor's bill in less than a year from the time it is made. Why such an idea should exist, while the butcher and grocer and every other tradesman is steadily presenting the doctor his account in from thirty to sixty days, I do not know. I do know that I have lost many a dollar by neglecting to present my account when it was fresh in the mind of the patient. It is probably true of all bills, medical as well as others, that they had best be collected early and often. They are then smaller and more easily paid. I know of no reason why physicians' accounts should not be presented and collected at the end of every ninety days.

If a uniform method could be adopted by all the physicians of any given neighborhood, and surely there is no reason why there may not be, it would be more helpful to all. In every community, large or small, there ought to be sufficient harmony among medical men that concerted action might be taken as to an established fee-bill to be religiously and absolutely followed by all, so that a uniform method in the collection of accounts might be established, so that lists of delinquent debtors could be exchanged, and nothing be omitted which should tend to the up-building of each physician's business and material interests. It would not prove amiss should we draw a lesson from the trades-unions and organizations for mutual protection which are so familiar to us in the business world.

If the medical profession is to be placed upon a higher plane in the matter of its emoluments and rewards, so that as old age comes on and the hard work of youth and middle life is no longer possible, we shall be assured of competencies and positions of security, then indeed we must think once in a while of business, and not always of science. The sharp competitive struggle should not lead us, in our anxiety to be seen doing business, to do it for less fees. Fees are already too low, and should be raised, rather than lowered. Neither should it lead us to do for those who do not pay us and do not mean to, and at the same time are of the class who have money for everything else in the way of luxuries and pleasures. It should ever be our policy, early and late, in season and out of season, to teach the laity the lesson which is of so great importance to us, that we as laborers are worthy of our hire. We shall get little outside aid; even the laws of our land do not help us much. One lonesome legislator, indeed, during the last session in this State, introduced a measure to make doctors' bills against

estates a part of funeral expenses to be settled as preferred accounts, but he received little sympathy from his brother statesmen. However the medical legislation of the present time along the line of higher standards of medical education may assist future generations of medical men by the exclusion of quackery, it is of little help to those of us now in the field. We must help ourselves.

We are not necessarily humanitarians and philanthropists to the exclusion of every other sentiment; there is a higher duty—that of self-protection. It is too narrow a view to take to be contented simply with a good living as we go along. Ample provision for the future is a duty which we owe to ourselves, to each other, to our families, to our children who will live after us; and deep in our innermost hearts should be the resolve to advance by all the means in our power the business status of our profession.

## CLINICAL LECTURE.

### THE ASPIRATION AND CHEMICAL EXAMINATION OF THE GASTRIC CONTENTS<sup>1</sup>

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WE shall consider this morning the chemically diagnostic use of the stomach-tube, removing samples of chyme, and investigating the course of digestion by analysis.

To be strictly scientific, I should like to treat every case of gastric disease only after chemical examination of the chyme—not neglecting other methods. As a matter of fact, I do not practise this in more than half of the cases that present themselves. The average patient prefers guesswork, and a possible delay of relief, to the scientific but disagreeable procedure of passing the tube. The test is best applied after a light and simple meal. I like for most cases the following meal which represents all kinds of simple and nutritious foods, including fats, carbohydrates, and both animal and vegetable albumins, which are digested in a slightly different manner. It consists of a slice of bread and butter, a chop or small steak, broiled, and a glass of water.

The patient, Dr. —, is a comparatively young man, ordinarily in good health, who complains of distress after eating, of sick headache, of some belching of gas, of lack of appetite. The bowels are usually regular, and there is no history of vomiting. The case appears to be a transient dyspepsia, since there is no dilatation of the stomach, and since other organic conditions have been more or less positively excluded. It is also probable that the dyspepsia is of the common subacid and atonic type. In men, regularity of the bowels is the usual condition with dyspepsia. The bowels may be irritated into a diarrhea by the unexpected discharge into

<sup>1</sup> Delivered before the senior medical students of the University of Buffalo.



the duodenum of a mass of fermenting chyme, but when the stomach-trouble begins gradually and persists, the intestine usually accommodates itself to circumstances. In fact, there are many persons who consider themselves in good health who have a chronic failure of the gastric function, the bowels performing vicariously the duties of the stomach. Vomiting, it seems to me, should not usually be considered an abnormality, and very seldom an abnormal symptom of the stomach. It is a conservative process, allowing the stomach to rid itself of poisonous or irritating materials, or of food which is irritating simply because it is superfluous. The horse, which rarely vomits, is especially subject to violent and dangerous functional gastro-intestinal disturbances. The cat, which vomits readily and voluntarily, almost never has such trouble. As a matter of experience, I am rarely consulted by persons who vomit freely. Vomiting, however, becomes serious when it is a reflex from cerebral, intestinal, peritoneal, and uterine troubles, and when it marks severe organic lesions of the stomach.

The passage of the stomach-tube is a matter to be considered seriously and undertaken with care. It has caused death, and you can readily appreciate the contraindication in advanced heart-disease, pregnancy, arterial degeneration of old age, syphilis, etc., especially when the degeneration has resulted in aneurism. I do not understand that the danger, even in thoracic aneurism, is from the direct impingement of the tube, but rather from the straining and gagging of the patient and the resulting rise of blood-tension. The local gastric conditions, which contraindicate the passage of the tube, may be summed up in the one word ulcer, including any kind of ulcer, as of the peptic type or due to the breaking down of a cancer.

Obviously, most of the dangers here enumerated may be excluded in the present case. I shall, however, examine the mouth and throat to see that no false teeth are present, and that there is plenty of room for the passage of the tube through the fauces, and I shall listen also to the heart—which is beating normally, without murmur.

Patients usually prepare themselves for the ordeal by throwing the head backward, thinking thus to lessen the angle in the throat. This attitude, however, makes a compound curve in the esophagus, and really hinders the passage of the tube, so the patient must be directed to sit with the head upright. You will notice that I am holding the tube under the warm-water faucet. This is merely to lubricate the tube, and prevent the increased reflex from a cold body. The tube should be thoroughly cleansed and disinfected immediately after use, and put away in readiness for the next case. The patient is directed to "swallow hard whenever he gags," and, pushing gently on the tube, it soon passes till the fifty-five centimeter-mark is at the incisor teeth. At this depth, the tube works best in almost all adults with surprisingly little variation, due to difference in height.

I shall try to remove the gastric contents by expression, pressing my hand over part of the left hypochondrium and epigastrium, and directing the patient to breathe deeply, I follow each expiration with my hand and resist the expansion of the chest during inspiration. With

this pressure, the gastric muscle is able to force some of the chyme out through the tube, and fifty c.c. are readily collected. I must confess to having been unusually successful with the method of expression in the present instance. I expect in most cases to be obliged to strip the tube with this roller-pump, and thus obtain the gastric contents by suction.

An inspection of the matter obtained shows the remains of bread, well masticated and softened, with little oil-globules representing butter, and partially disintegrated bits of meat. There is a slight rancid odor of butyric acid. There is undoubtedly some acetic and lactic fermentation with the butyric. There is no more than the normal slight amount of gastric mucus present. This stringy mass comes from the esophagus and is normal. I have known, however, of the diagnosis of gastric catarrh based on the presence of esophageal slime. Thus from simple inspection we are able to say that mastication and the rest of mechanical digestion are well performed, at least in the present instance, that there is a slight amount of fermentation, that there is no gastric catarrh, nor evidence of other organic lesion.

Litmus-paper shows the chyme to be acid as it practically always is, unless mixed with large amounts of bile, or blood, or with alkaline drugs. It must next be determined whether the acidity is due to free acid or to acid compounds. I have here a number of papers stained with anilin dyes, which change color in the presence of almost any free acid, certainly in the presence of those which we may find in the stomach contents. Tropæolin changes from yellow to magenta, gentian-violet to sky-blue, Congo red to blue, and benzo-purpurin from reddish to dark blue. Only the last two changes occur here, showing that there is free acid present, but to a slight degree only. To determine whether the free acid is hydrochloric, at least in part, I use a mixture of resorcin and cane-sugar, either a three per cent. watery solution of each (Boas' solution), or paper wet with such a solution and dried, or the crystals fused together. The test-paper is wet with the gastric contents and dried with heat, either over a gas or alcohol flame, or on a lampshade, or even a register, if the last is hot enough. Here you will see a distinctly reddish tinge, indicating, I believe, that an anilin dye is formed by the action of the hydrochloric acid on the aromatic ring contained in the resorcin. The same color-reaction occurs, you see, when the fused crystals of resorcin and sugar are heated in a capsule with a drop or two of gastric contents.

Next, let us ask, if carbohydrate digestion is normal? The filtrate from the chyme contains no starch, since iodine gives no color. The ordinary copper reduction-test shows that there is considerable sugar present. This sugar, by the way, is maltose, and not glucose, as was formerly taught. Up to three-quarters or an hour after a light test-meal, small quantities of starch may be present in the filtrate. Here, on account of a mistake, we are examining gastric contents nearly two hours after a meal. The test, to be rigid, should be made an hour after eating; to exclude minor disturbances of digestion, it should be made an hour and a half after eating. At this late

period of digestion we are making a very lenient test, so that apparently normal results cannot be taken positively, while deviations from the normal are all the more significant. Raw starch, which is commonly taken in the form of bananas, passes through the digestive juices till the pancreatic ferment is reached. Even cooked starch is not digested by ptyalin except in the liquid contents of the stomach—you see that the iodine-reaction occurs strongly in the unfiltered mass of chyme. While a moderate reduction of copper is normal, a heavy precipitate would indicate, not that carbohydrate digestion was unusually good, but that absorption was deficient, for the fully digested products of digestion should be absorbed from the stomach almost as soon as formed. In making these estimates, we must rely on experience and judgments, and, in fact, if carbohydrate food does not form acetic and butyric acids after gastric digestion is well established, that is after one hour P. C., we must be fairly well satisfied.

Nearly all albuminoid food enters the stomach coagulated by heat; if not, it is probably coagulated by the rennet ferment or ferments, as the casein of milk certainly is. Then, the hydrochloric acid forms an acid albuminate which is soluble, but which is coagulated by heat again, as you see by this test. Filtering out the albumin, the remaining clear liquid is floated over cold nitric acid, when a ring of albumose or partially peptonized albumin is formed. Normally, much of the albuminous food is digested only to this degree. Meat, however, is digested into true peptone, which I throw down by adding a fresh solution of tannic acid to the third filtrate. Tannic acid must not be used if starch is present, because the latter would give this same reaction; in the presence of dissolved starch, mercuric chloride or some other reagent must be used in the third step. If the solution of tannic acid stands too long, gallic acid is formed, whose therapeutic value, you remember, is due to its inability to precipitate any form of albumin. I have described the digestion of albumins from a clinical standpoint. The precipitations here are about what we should expect normally, but we are applying the test two hours after eating instead of one hour after. At this stage of digestion, acid albumin should be peptonized almost as soon as formed, so that we may conclude that digestion is slow. The absorptive power of the stomach seems to be normal, as both sugar (digested carbohydrate) and peptone (digested albumin) are present in very moderate quantities. This is about the only reliable test for absorption, the elimination of potassium iodide through the mouth being utterly unreliable.

How are we to account for the slow digestion of albumin and the persistent, though slight, fermentation of carbohydrates? By the fact that very little hydrochloric acid is secreted. After a hearty meal this acid is taken up by albumin so that it may never be found free, but after a light meal, and especially at the time when digestion should be at its height, two hours after eating, there should be found in the chyme nearly the physiological proportion of acid in the clear gastric juice, that is, two per mille, or thereabouts. We need no quantitative

estimation in this case, for the reaction with resorcin was slight, and even a tenth of the normal proportion of hydrochloric acid would not only yield a marked test with this reagent, but also with all the aniline dyes mentioned; whereas, free acidity was shown only by the more delicate tests with Congo red and benzo-purpurin.

There is an evident call for assisting the acid secretion of the stomach by administering a few drops of hydrochloric acid when it is most needed, about an hour after eating, and by urging the free ingestion of common salt on account of the contained chlorin. A better acquaintance with the case may suggest the need of rest from professional work, of positively tonic treatment, or of stimulating the glands of the stomach by using a bitter before meals, or preferably strychnin, which is both a bitter and a definite excitator of efferent nerves. Dieting, except so far as to avoid rich and useless preparations, should not be insisted on, except in extreme cases. A patient like the present one needs the appetizing effects of a variety of foods, and should not be limited to substances that are simply nutritious without being palatable.

## CLINICAL MEMORANDUM.

### A CASE OF HYPEROSTOSIS CRANII.<sup>1</sup>

By THEODORE DILLER, M.D.,

OF PITTSBURG, PA.;

VISITING PHYSICIAN TO ST. FRANCIS' HOSPITAL.

THIS remarkable and, fortunately, rare disease has been so recently described by Putnam<sup>2</sup> that I shall give only a very brief outline of a case now under my observation:

R. B., unmarried woman, aged thirty-one years; height 4 ft. 9 in. Father died of "brain-softening" (out of his mind five or six weeks); mother died of diabetes. Patient has four brothers and one sister, all healthy. Her head seemed to be somewhat misshapen from birth. When quite young, protrusion of her eyeballs was noted, and when she became old enough to go about the streets other children commented on this odd feature. Since childhood she has frequently been troubled with very severe headaches.

As a child, she was bright, cheerful, affectionate, possessed an unusually retentive memory, and excelled most other children of her age in her studies. Physically she was as active as she was mentally alert, and as she grew older concerned herself a great deal in the welfare of her brothers and sister.

When twenty-one or twenty-two years old, she had an attack of melancholia lasting about six months, from which she made a complete recovery. Up to this time the malformation of the head had increased. For the past ten years it has remained practically unchanged.

At the age of twenty-five she "slept" for a period of two days, and again at the age of twenty-seven. In 1895 she had an attack of mania lasting two or three weeks.

<sup>1</sup> Reported at a meeting of the Pittsburgh Academy of Medicine, September 7, 1896.

<sup>2</sup> *Amer. Jour. Med. Sciences*, July, 1896. Bibliography, with "added" cases.



Complete recovery followed. She was admitted to the insane department of St. Francis' Hospital, February 1st last, in a maniacal condition. Her mental condition has now greatly improved.

In general appearance she is greatly undersized (not a family characteristic), has misshapen head, protruding, widely separated eyeballs, prominent nose, thick-set neck, and wide and sunken face; heavy, protruding, lower jaw

FIG. 1.



and large nose are characteristics which go to make up a most striking and grotesque figure. Her forehead is high. The cranium is flattened at the occiput, and appears as if pressed out from the left frontal eminence to the right occipital region. There is on the forehead a localized overgrowth of bone, three inches in diameter, which has its center one inch to the left of the median line. The fingers are short and stubby, the second and third on both hands being webbed up to the second phalangeal articulation. The second and third toes on both feet are completely and very closely webbed, while the third and fourth toes up to the last phalangeal joint on both feet are also webbed. Her skin is somewhat coarse and greasy, showing a number of folds. The hair is stiff.

The "stubby" and webbed condition of hands and feet and the dwarfish stature of the patient are features which,

FIG. 2.



together with the early appearance of malformation of the cranium, point most strongly to a teratologic defect of the trophic apparatus as the cause of the symptoms in this case, and lend support, as much as one case can, to this theory of the disease.

## MEDICAL PROGRESS.

**Bilious Malarial Fever with Hemoglobinuria.**—As the result of a clinico-pathologic investigation BOISSON (*Revue de Médecine*, 1896, No. 5, p. 360) arrives at the conclusion that the hemoglobinuria observed in certain forms of malarial fever is due to excessive destruction of red blood-corpuscles by the plasmodium malarie of Laveran, in conjunction with functional insufficiency of the spleen and probably of other structures, such as the bone-marrow, believed to be concerned in the elaboration of the products resulting from the disintegration of the red cells. The icterus that accompanies the hemoglobinuria in intense attacks is of hematogenous origin.

**The Treatment of Labyrinth Vertigo.**—At the recent Congress of the French Society of Laryngology, Otology, and Rhinology, GELLÉ (*Gaz. heb. de Méd. et de Chir.*, 1896, No. 41, p. 485) discussed the subject of labyrinth vertigo and the modes of treating the condition. Most commonly the affection is a result of lesions of the tympanum or its adnexa. Under these circumstances the treatment will be directed toward exhausting the tympanic cavity, freeing the labyrinth by means of politizerization, catheterization, rarefaction, etc. If the morbid changes are chronic in character surgical intervention will be called for. In case of hemorrhage into the tympanum leeches should be applied to the mastoid region, a suppressed bloody discharge reestablished, a drastic administered and a milk-diet observed, with rest and injections of ergotin. If hyperemia of the tympanum exist, paracentesis should be practised, followed by irrigation with tepid water to facilitate the flow of blood. Later, hypodermic injections of pilocarpin may be employed; or iodids may be administered; gouty patients should be given colchicum, or colchicin, or sodium salicylate. In cases of cardiac or renal disease a milk-diet and intestinal revulsives render a useful service. If the labyrinth hyperemia be active the same measures are employed as in the case of hemorrhage. If the hyperemia is passive and due to central circulatory disturbances, remedies suitable for these conditions are indicated (such as a milk-diet, strophanthus, etc.), with the avoidance of hot baths and various thermal excitants. Bromids and arsenic also are indicated. The cold douche is applicable at the onset of the passive and neurasthenic forms, with the hope of preventing their full development. If the vertigo be due to local anemia, it is best treated by means of tonics—iron, iodids, kola, caffeine. In case of inflammation of the internal ear, pilocarpin may be employed at first; quinin and strychnin also are useful. If a syphilitic origin is suspected, specific treatment should be employed. Quite often labyrinth vertigo is due to mechanical causes—a blow, deglutition, centripetal compression, mastication, congestion, etc. The best remedy is quinin sulphate—given at first in doses of three grains, and after the lapse of a few days of four grains, thrice daily. After an intermission the medication is resumed, notwithstanding ringing in the ears. In addition general sedative treatment may be employed. Air-douching and paracentesis of the tympanum may af-

ford relief. In nervous patients cold douching accelerates recovery. When infectious diseases and toxic conditions are attended with vertigo and deafness, appropriate measures should be directed against the constitutional condition. Vertigo is often a symptom of sclerosis, even in advance of deafness, and under these circumstances it may be supposed to be of gastric origin. Vertigo is often due to uterine, hemorrhoidal, pulmonary, and psychic disorders. The labyrinth, like a monometer, responds readily to variations in blood-pressure and nervous impressionability, and manifests its disturbance by vertigo, roaring in the ears, hallucinations.

**The Malarial Cachexia and its Treatment.**—At a recent meeting of Société de Thérapeutique, VIDAL (*l'Union Médicale*, 1896, No. 24, p. 284) related the results of a clinical study of the malarial cachexia, of which the most conspicuous manifestations are pallor, especially of the face, with a bluish tint of the conjunctivæ, respiratory difficulty, edema of the legs, puffiness of the face, and distention of the abdomen, with or without ascites. The patients complain of palpitation, of cyanosis, of coldness of the extremities, and of tremor; and they are apathetic, indisposed to activity, and depressed, and suffer from profound lassitude, physical and moral. Physical examination discloses, in addition to hypertrophy of spleen and liver, pronounced hypertrophy of the heart. On auscultation, the heart-sounds are feeble and irregular, and the pulse frequent; often, instead of a systolic bruit at the apex, a murmur may be heard following the muffled second sound. These signs are attributed to a myocarditis, which, in turn, is made responsible for the symptoms of the malarial cachexia. From this point of view treatment has been directed to the heart, diuretic medication being systematically employed. In those who can tolerate it, an absolute milk-diet yields excellent results. Often, however, solid food must be allowed. If the heart is feeble or arrhythmic, a dose of fifteen drops of a  $\frac{1}{10}$  per cent. solution of crystallized digitalin is given at the beginning, followed by oxymel of squill, and the salts of potassium. Each morning, for ten or twelve days, the patient takes, besides, a sixth of a grain of calomel. Under this plan of treatment the excretion of urine increases, the edema disappears, the color brightens, the action of the heart improves; and in the course of from two to six weeks the patients are free of their cachexia, and prepared for the treatment of their chronic malarial infection with arsenic, phosphates, hydrotherapy, etc.

**A New Method of Preserving Anatomic Specimens.**—At a recent meeting of the Société de Biologie, MELNIKOFF-RAZVEDENKOFF (*Médecine Moderne*, 1896, No. 47, p. 376) described a new method of preserving anatomic specimens. The fresh organ is placed for twenty-four hours upon a bed of cotton saturated with a forty-per cent. solution of formaldehyde. Then for six or eight hours it is kept in ninety-five per cent. alcohol. Finally, it may be preserved in a solution consisting of distilled water, 100; potassium acetate, 30; glycerin, 60; or in a two-per cent. solution of formalin; or in alcohol; or in a preparation consisting of gelatin, 100 grams, dissolved in 600 grams

of hot water, with the addition of 350 c.cm. of a solution of potassium acetate, then filtering and adding 700 c.cm. of glycerin.

**The Metabolic Changes of Acute Yellow Atrophy of the Liver.**—RICHTER (*Berliner klinische Wochenschrift*, 1896, No. 21, p. 453) reports two cases of yellow atrophy of the liver, both in women, and both developing in the sequence of syphilitic infection, in which he found, in contravention of general belief, no deficiency in the excretion in the urine of urea, and no increase in the excretion of ammonia. There was also an increase in the elimination of uric acid and allied substances—the so-called alloxan-bodies. The total amount of nitrogenous elimination was augmented. These results would seem to show that urea is formed in other organs than the liver in greater degree than has heretofore been believed, and that in case of destructive disease of the liver the function of urea-formation is taken up in increased measure by those organs.

## THERAPEUTIC NOTES.

**Orphol as an Intestinal Antiseptic.**—E. CHAUMIER (*Therapeutische Wochenschrift*, 1895, 48) says that of all intestinal antiseptics B. naphthol has so far given the best results. Its unpleasant taste, odor, and the burning sensations in the stomach, to which it gives rise, render it difficult of administration, especially to children. Many substitutes, such as betol, salol, and salicylate of bismuth, have been employed, but found unsatisfactory.

In the intestinal antiseptic orphol we have a remedy which gives the same good results as are obtained from the use of B. naphthol, without its drawbacks. It does not produce any burning sensation, and is easily administered, even to children. In the diarrhea of children it is especially serviceable. The dose varies from one to five grams per diem for children and infants. It may be given either with milk or honey. The noticeable good effects in these cases are that the stools lose that fetid odor, watery character, and green color. The dose for adults is from five to ten grams a day. Good results have been obtained from its administration in the diarrhea of phthisis and typhoid fever in adults. In phthisical patients the colicky pains have been known to vanish, the number of stools to diminish, and the appetite to improve considerably by the use of orphol.

### For Pruritus of the Scrotum.—

B Carbolic acid	3 iv
Glycerin	f 3 ii
Alcohol	f 3 v
Water	f 3 viii
Mix.	

Into a glass of water as hot as the patient can bear is poured from one to four tablespoonfuls of this solution, and with the fluid gauze is saturated in which the scrotum is enveloped. The dressing is completed by means of a rubber suspensory.—BROCC, *Semaine Médicale*, 1896, No. 30.



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SATURDAY, OCTOBER 24, 1896.

#### A WESTERN DIPLOMA-MILL.

"ANNUAL Announcement of the Illinois Health University in Chicago for the year 1896" is the ambitious title of what appears from the circular to be a most barefaced and outrageous swindle. Immediately beneath the title is the distressing information that the institution is incorporated under the laws of the State of Illinois. From the amount and character of abuse that is poured out against the Illinois State Board of Health, we judge that this "University" has come into violent contact with the latter and has received such a serious blow that it can scarcely set itself right before even an undiscerning public.

The first page of the announcement contains a quotation from the "Writings of an Eminent Physician." We cannot place the excerpt positively, but we believe that it is extracted from the writings of an eclectic surgeon who has hitherto been able to circulate the productions of his pen only among his fellow paranoiacs in the Ward's Island asylum, and some of it has recently illumined the pages of "The Last Writings of a Paranoiac."

The photographs of the professors occupy a

conspicuous place in the announcement, and if one may judge from appearances and costume, the majority of them have not been away from Russia, Poland, and Van Diemen's Land long enough to have been forgotten.

The milk in the cocoanut, however, is reserved to the last, and consists of advice to prospective students, course of study, and requisites for graduation, and it is to these that we wish particularly to call attention. In just these words it says: "We are opposed to the absurd, unjust, and unreasonable rules compelling students to attend a medical college before granting them the degree of M.D., and we are prepared to legally graduate men and women at home without even ever having seen them, for the sum of \$75." Those who wish to apply for their degree must furnish evidence that they are of moral character (probably to satisfy the conscientious scruples of the Reverend, who is the "Prof." of anatomy and physiology) and that they have conducted a safe (*sic*) practise for a term of years. The announcement naively adds that there are many men and women in this country who are desirous of appending M.D. to their names, so as to increase their earning capacity, but they are prevented from doing so by lack of funds. To all such the advice is given that they send a dollar a month for books, to which they should apply themselves for an hour each evening during the winter, and in the meantime that they gather together the necessary \$75 before spring, when the University, as an act of righteous duty and as a reward of merit, will legally confer on them the degree of doctor of medicine.

The books which such students are urged to buy are: "The Tricks, Deception, and Frauds Practised in the United States by So-called State Boards of Health and State Boards of Medical Examiners;" "Consumption; How to Beat it Scientifically;" "The Ridiculous and Absurd Means Recommended by Medical Monopoly Doctors;" "The Duty of the Clergy to Assist in Repealing Such Infamous Medical Laws as that Now in Force in Illinois." These titles will convey an idea of the character of the studies which students are requested to pursue.

It would seem unnecessary to make any com-

ment on what is so openly fraudulent as this diploma-mill. Yet we are not unmindful that there are in this vast land, as the circular truthfully says, those who would like to attach M.D. to their names, but who are prevented from so doing on account of mental and financial shortcomings. It is for these and for the originally dishonest and ignorant that the circular is intended.

There should be some means of enlightening legislative bodies who are responsible for the legal existence of such pedagogic and moral monstrosities as the Illinois Health University. They should be awakened to the fact that by chartering such an institution, they are as culpable in jeopardizing and menacing the welfare of the public as they would be if they legislated quarantine out of existence and so let in some horrible plague. In the absence of such illumination, it behooves medical men, the country over, to be watchful that no one of their community, be he ever so devoid of principle, is dragged into the net of this legalized medical cormorant of Chicago.

#### RECENT PROGRESS IN THE KNOWLEDGE OF HEREDITARY SYPHILIS.

It has not yet been demonstrated that syphilis is of bacterial origin, but our knowledge of this far-reaching infection has been greatly amplified and modified by clinical and pathological discoveries, which have been made while studying the nature and course of other infectious diseases. It is now definitely known that in many cases there is an intimate association or symbiosis of many morbid states and conditions, and that syphilis pathologically modifies other morbid conditions. In its turn, its pathological developments may in like manner be acted upon by other diseases. These facts have been well presented in a short essay on hereditary syphilis and tuberculosis by Hochsinger ("Verhandlungen der Deut. Dermatologischen Gesellschaft," Vienna, 1894, pp. 335 *et seq.*), which will undoubtedly lead, in time, to a revision and recasting of all our knowledge of the pathological anatomy of inherited syphilis. He gives the history of three cases in which the symbiosis of syphilis and tuberculosis was positively proved, and these histories quite clearly show that the latter infection was the pre-

dominating one. Had not these cases been so thoroughly studied, both histologically and bacteriologically, they would, like many thousands before them, have been incontinently set down as typical examples of heredity with visceral lesions.

As a result of these studies and observations, Hochsinger concludes that a mixed infection of hereditary syphilis and tuberculosis may be found in the very youngest children, and that thus a double infection may be simultaneously transmitted at conception. These observations also show that all nodules, caseous or otherwise, found in hereditarily syphilitic infants should not be pronounced to be syphilitic gummata until it is shown that they do not contain the tubercular bacillus. In hereditarily syphilitic pneumonia there is true interstitial granulation-tissue infiltration, with perivascular cell-proliferation into the lung-parenchyma, and no tubercular bacilli.

The foregoing considerations very clearly emphasize the facts that in many bad cases of hereditary syphilis there is, in all probability, a synchronous tubercular infection, and that no nodules found in the viscera, and, indeed, we may add, in the bones, joints, and skin of these subjects, should be pronounced to be gummata until the influence of tuberculosis has been excluded. Diagnoses which are based on macroscopical appearances are not reliable, since to the eye the lesions of syphilis very often resemble those of tuberculosis in a striking manner. In some nodules there has been found evidence of the action of both syphilis and tuberculosis.

In earlier days we were accustomed to speak of the cause of death of infants and children hereditarily syphilitic as due to congenital want of vitality, particularly when, at the autopsy, we found no visible involvement of an important organ. Pavloff (*Annales de Dermat. et de Syphiligraph.* July, 1895) concludes that vessel-changes are the cause of death of most hereditarily syphilitic children, and he makes the pertinent suggestion that this extensively distributed morbid condition indicates the great necessity of a general systematic treatment. It is important, in this connection, to remember that Mracek found in the viscera of eighteen hereditarily syphilitic children hemorrhages of such severity that they



constituted the active cause of death. As bearing upon Pavloff's conclusions, Bar and Tissier (*Ibid.*, pp. 1156 *et seq.*, 1895), at the autopsy of a child at term, whose parents were victims of active syphilis, found pathological changes in the veins and arteries throughout the entire body.

The histories of cases reported by Murri, Schumacher, and Goetze have shown that there is a probable etiological relation between acquired syphilis in some subjects and paroxysmal hemoglobinuria. Recent observations seem to show that the morbid combination may occur in the course of hereditary syphilis. Courtois-Suffit (*Médecine Moderne*, No. 18, March 2, 1895) reports the case of a four-year-old child born of syphilitic parents, presenting characteristic lesions of the tibia, who, during two years (third and fourth of life), suffered from attacks of hemoglobinuria, at first when exposed to severe cold, and later on even when the temperature was not low. Treatment by mercurial inunctions and the ingestion of potassium iodid caused improvement in the osseous lesions and allowed the child to escape any attacks of hemoglobinuria during a severe winter. Comby, in a later communication (*Ibid.*, No. 18, March 6, 1895), claims that he had previously pointed out this symptom as being etiologically related to hereditary syphilis. Goetze (*Berl. klin. Wochenschrift*, 1884, p. 716) reported the case of a child, nine years old, who presented structural evidences of hereditary syphilis, but whose medical history was unknown, who suffered from hemoglobinuria. The study of this interesting question has only just begun, it being yet in the stage of case-reports.

A like condition prevails as to the clinical history and the pathology of the changes and disorders of kidneys in hereditary syphilis. Hoch (*Wien. Med. Presse*, 1894, p. 1697) details the case of a typical syphilitic infant, three months old, in which, while favoring the view that the nephritis was caused by syphilis, he suggests that perhaps it was due to the action of mercurials. In this case the hiatus consists in the absence of an autopsy and of histological findings.

In a case reported by Massalongo, we find more satisfactory data (*Arch. per Scienze Mediche*, ix and ii, 1895); the infant was six months old,

born of a syphilitic mother, and it presented typical lesions. Before death it suffered from albuminuria, edema, convulsions, and uremic coma. Histological examination of the kidneys showed well-marked changes in the arteries—endarteritis and periarteritis—and thromboses, extensive interstitial nephritis, and great increase in the connective tissue, which compressed the glomeruli and produced sclerosis of the organ. The lesions resembled those of late nephritis in acquired syphilis of adults. Massalongo thinks that these visceral changes began in intra-uterine life.

With the expansion of our knowledge of syphilis as a chronic infectious disease, it seems that many surprises are in store for us. Cases reported by Hutchinson, D'Ornellas, Morgan, Elsenberg, and myself, have shown very clearly that Raynaud's and Morvan's diseases may occur in the course of acquired syphilis, and that the latter infectious process is, in all probability, etiologically related to them. Krisowski (*Jahrbuch f. Kinderheilkunde*, vol. xi, pp. 57 *et seq.*) described a well-observed case of hereditary syphilis, in which symmetrical gangrene was a prominent symptom. Under mercurial inunctions and the internal use of potassium iodid a cure was promptly brought about. Here, then, is another subject for study in the protean drama of hereditary syphilis.

ROBERT W. TAYLOR, M.D.

## ECHOES AND NEWS.

**A Boy's Cast-off Skin.**—A Florida paper reports that an eight-year-old boy has shed his skin. That on the face came off separately, but from the neck down the cuticle moved off by way of the hands and feet without breaking.

**Dr. T. Colcott Fox.**—The New York Dermatological Society held a special meeting, October 19, at the New York Academy of Medicine, in honor of Dr. T. Colcott Fox, the distinguished dermatologist of London. The informal social functions were not the least enjoyable feature.

**St. Luke's Consecrated.**—The new buildings and chapel at St. Luke's Hospital, New York, at West 113th street and Morningside Heights, were consecrated October 17th by Bishops Potter of New York, Littlejohn of Long Island, and Huntington of Central New York.

**The Jews and the International Medical Congress.**—The Exhibits' Committee of the Twelfth International Con-

gress has issued a statement saying, that the Minister of the Interior has authorized the arrival at Moscow of foreign Jewish savants under the same conditions as other foreigners.

**King William's Touch.**—*The British Medical Journal* concludes an editorial on "Psychic Vaccination" by giving to those who look to hypnotism for healing, the advice of King William to those who came to him to be touched for the king's evil, "God give you better health and more sense."

**Antipodean Legislation.**—The New Zealand Government has introduced a bill which makes it the duty of the master or owner of a vessel to prevent any one affected with tuberculosis from embarking for New Zealand. Should a tuberculous patient land, he and the master are liable to a fine of £10.

**Paucity of Medical Men in Russia.**—M. Anitchkoff, Under-Secretary of the Ministry of Education, says that in the whole Russian Empire, with a population of 110,000,000, there are only 18,334 qualified practitioners. This gives a ratio of one practitioner to 6000 inhabitants, while in Germany the proportion is one to 3000, in France one to 1800, and in England one to 1600.

**Resigns From the Army.**—Dr. John B. Hamilton, Surgeon-General of the United States Marine Hospital, stationed in Chicago, has sent in his resignation to President Cleveland. Some time ago Dr. Hamilton was ordered to the Marine Hospital at San Francisco by the War Department. He objected to being transferred, and made an official protest. This protest was overruled.

**A New Medical Monthly.**—*Moody's Magazine of Medicine* is the name of the latest addition to the long list of American medical periodicals. It is edited by Raley H. Bell, M.D., and published in Atlanta, Ga. The plan and policy of the journal as announced in the prospectus is to interest the rank and file of the medical profession, particularly throughout the New South and West. We doubt the propriety of combining the features of a family magazine with those of a medical journal, and we question the good taste of such a frontispiece as appears in the first number.

**Degenerative Changes in the Brain-cells of the Non-insane.**—Dr. Robert Hutchison, in *Edinburgh Hospital Reports*, from a histological examination, finds that the brains of the sane and the insane show similar changes. With the exception of general paralysis of the insane there is little that is special to the insane pathologically. Pigmentation-cells, for example, are to be found in all sorts of people, especially after middle life. He throws doubt on the association of vacuolation of cells with epilepsy. He falls back upon the nebulous hypothesis of inherent instability of the brain.

**The Marine-Hospital Service.**—There will be held in Washington, D. C., on February 3, 1897, a competitive examination of candidates for appointment to the position of assistant surgeon in the United States Marine-Hospital

Service. Candidates are required to be not less than twenty-one years of age, and no appointment is made of any candidate over thirty years of age. They must be graduates of a reputable medical college and furnish testimonials as to character. Full information may be obtained by addressing the Surgeon-General of the Marine-Hospital Service, Washington, D. C.

**The Syracuse Medical College.**—Dr. Stephen Smith of New York spoke of the new Syracuse Medical College, in his address at its opening, as follows: "The college of medicine of the Syracuse University is the child of a healthy parentage. It is the legitimate offspring of two medical schools that, in their day, made a most honorable record—the College of Physicians and Surgeons of Western New York, and the Geneva Medical College. It is gratifying to state on this occasion that this college has been one of the first to adopt a graded course of instruction, which is the most important reform yet made in the method of teaching. This has been followed by class recitations, instead of lectures, in teaching the practical branches—a change of the greatest value to the individual student. Finally, it is about to extend the term of study to four years and thus place itself in the front rank of the most advanced colleges in its methods of instruction."

**Parasitic Origin of Trachoma.**—*The Lancet*, September 12th, makes mention that Professor Guarneri of the University of Pisa has published in the July number of the *Clinica Moderna* of Florence a preliminary account of his researches into the pathogenesis of trachoma. In fourteen hospital-patients he has found in the detritus obtained by energetic "raclage" of the trachoma-granulations some very small round bodies capable of being intensely stained, preferably with a two per cent. solution of magenta-red in water. They can then be recognized with a magnifying power of only ninety diameters, although they are so small that the diameter of some is between a third and a half of that of a red blood-corpuscle. Professor Guarneri is inclined to suspect that they are of a parasitic nature and belong to the class of *Blastomycetes*, but he has not yet succeeded in cultivating them, and is still pursuing the investigation.

**The Alvarenga Prize.**—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income of one year of the bequest of the late Señor Alvarenga, and amounting to \$180, will be made on July 14, 1897, provided that an essay deemed by the Committee of Award to be worthy of the prize shall have been offered. Essays intended for competition may be upon any subject in medicine, but cannot have been published, and must be received by the Secretary of the College on or before May 1, 1897. Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author. It is a condition of competition that the successful essay or a copy of it shall remain in the possession of the College; other essays will be returned upon application within three



months after the award. The Alvarenga Prize for 1896 was not awarded.

**National Sanitary Association.**—The second annual convention of this society was held October 13th to 15th, at Brooklyn. Among the papers presented was one on "The Municipal Control of the Consumptive," which was read by Dr. T. C. Craig, U. S. N; and one on "The Work of the Division of Contagious Diseases of the New York Health Department," which was read by Dr. Charles S. Benedict, chief of that department. Dr. E. A. Wilson, health officer of Meriden, Conn., spoke on the advisability of leaving the question of disinfection to the attending physician, although he did not favor too much reliance on them in that respect. He alluded to the fact that he found no difficulty in keeping track of cases of contagious diseases in the city or town districts under his control, but it was in the country where the danger lay. Dr. A. N. Bell discussed the value of isolation hospitals, holding the opinion that they are of minor importance. Excepting in the case of small-pox, he believed there was no evidence of the aerial distribution of contagious diseases. He believed, further, that there was no positive evidence of any disease crossing the street except small-pox. Dr. E. H. Bartley read a paper on the educational duties and privileges of Boards of Health, closing with the practical suggestion that there be a journal established which shall be the joint product of all the State Boards of Health of the country.

## SPECIAL ARTICLE.

### ANESTHESIA JUBILEE.

PUBLIC EXERCISES HELD IN THE MASSACHUSETTS GENERAL HOSPITAL, BOSTON, OCTOBER 16, 1896, IN COMMEMORATION OF THE FIFTIETH ANNIVERSARY OF THE FIRST PUBLIC DEMONSTRATION OF SURGICAL ANESTHESIA.

[Special Report to the MEDICAL NEWS.]

THE trustees and visiting staff of the Massachusetts General Hospital with due consideration for the importance of the event to be commemorated, arranged for the celebration of the fiftieth anniversary of the discovery of surgical anesthesia. Large imposing invitations, printed on parchment paper, were issued and distributed among the prominent members of the profession throughout this country and in Europe. The invitations happily avoid any discrimination between the various claimants to the honor of the discovery. They read as follows: "Commemoration of the Fiftieth Anniversary of the First Public Demonstration of Surgical Anesthesia at the Massachusetts General Hospital, Boston, October 16, 1846. The honor of your company is requested October 16, 1896." At the top of the invitation is the seal, and at the bottom the picture of the hospital as it appeared in 1846.

In this broad spirit the invitations were issued, although in the course of the exercises there was no concealing the fact that in the special event commemorated Morton, who gave the anesthetic, and Warren, who assumed the responsibility of allowing it to be given to one of his patients

and who performed the operation, were the prominent actors in the discovery.

The guests were received by the committee in the old amphitheater, where ether was first given. It was arranged to conform as nearly as possible with the appearance it presented on that memorable morning in 1846. The original operating-table was in position, the same instruments were there, and the glass globe, through which the ether was administered. In an adjoining case was the old record-book in which the history of the patient was recorded and the account of the operation.

The book was opened to the page telling the story of this wonderful surgical operation of October 16th, but was dated Friday, September 25th, the day of the admission of the patient. He was Gilbert Abbott, a printer, who had a tumor of the neck. After a preliminary description of the case, the report goes on to say: "This case is remarkable in the annals of surgery. It was the first surgical operation performed under the influence of ether. Dr. Warren had been applied to by Dr. Morton, a dentist, with a request that he would try the inhalation of a fluid which he said he had found to be effectual in deadening pain during operations on the teeth. Dr. Warren having satisfied himself that the breathing of the fluid would be harmless, agreed to employ it when an opportunity presented, and determined to use it on this patient.

"Before the operation began, some time was lost in waiting for Dr. Morton, and ultimately it was thought he would not appear. At length he arrived, and explained his detention by informing Dr. Warren that he had been occupied in preparing his apparatus. This apparatus he then proceeded to apply, and after four or five minutes the patient appeared to be asleep, and the operation was performed as described.

"To the surprise of Dr. Warren and other gentlemen present, the patient did not shrink nor cry out, but during the insulation of the veins he began to move his limbs and utter extraordinary expressions, and these movements seemed to indicate the existence of pain, but after he had recovered his faculties he said he had experienced none, but only a sensation like that of scraping the part with a blunt instrument, and he ever after continued to say he had not felt any pain."

The guests were composed almost exclusively of members of the profession, but special honors were conferred upon Mrs. Morton, the widow of the discoverer, and members of her family, who were present.

Dr. John Collins Warren opened the formal exercises by reading the following cablegrams, two of a number, showing the widespread interest in the affair:

"CHRISTIANA, Sweden.

"Trustees and Staff Massachusetts General Hospital, Boston:

"Best congratulations on fiftieth anniversary.

"CESAR BOECK."

"Boston Massachusetts General Hospital, Collins Warren:

"The Moscow Surgical Society, at a special meeting held in honor of the fiftieth anniversary of the introduction of anesthetics, celebrates the memory of Morton and Simpson, the great benefactors of mankind. It greets

the committee, and wishes it every success in its labors on behalf of science, which knows no geographical boundary.

"DIAKOW, President.

"WARNECK, Secretary."

Mr. Charles H. Dalton, president of the trustees of the hospital, then read an address of welcome, in which he said:

"It is my privilege on behalf of the corporation of the Massachusetts General Hospital to welcome you here to-day as guests of this venerable institution. Though somewhat less than a century old, the hospital is one of the earliest in the country. It has long passed its infancy and youth, and has reached a period in its life already rich in history and traditions.

"For three generations the institution has never failed to have at its service the highest professional skill in all its constantly growing departments and scientific development, and the sympathy and confidence of the public. I do not refer to this record as being in any degree peculiar to this hospital. It is, in general, the common history of all similar institutions, illustrating, perhaps, in the most sincere form, man's humanity to man. If, however, we could imagine all this record erased, if all the intelligence of the physician, the skill of the surgeon, the watchfulness of the nurse, the benefactions of the public, and, more than all, the saving of life and relief of suffering were as nought, there would still remain one page in its history which of itself alone would be more than a recompense for the loss of all the rest, inasmuch as of what was inscribed thereon, the whole world has been the beneficiary, and, incidentally, has raised the name of the Massachusetts General Hospital to an honorable distinction at home and abroad. Fifty years ago to-day in the operating-theater, sulphuric ether was first given for the prevention of pain to a patient undergoing a capital operation. This application was made by Dr. W. T. G. Morton. The experiment was a success.

"Of the infinite blessings which followed this, the greatest gift of the century to mankind, of its contributions to the relief and safety of suffering humanity, to the surer confidence and success of the physician and surgeon in his efforts for the saving of human life, and in scientific investigation, it is not my function to speak. These themes are for the scholar and scientist.

"I have simply to express to you the cordial welcome of the corporation to this celebration of the fiftieth anniversary of the first surgical operation under which the patient suffered no pain, no discomfort, no anxiety. The occasion is unique."

The first paper on the program was read by Dr. Robert T. Davis of Fall River, who was present when Dr. Morton made his famous experiment.

Dr. Davis said: "Fifty years ago to-day occurred the first authentic, unquestionable, public exhibition of anesthesia during a surgical operation. As one of the few surviving witnesses of that memorable event—the most important in surgical, and one of the most important in human history—I have been invited to state my recollections of the incidents attending it, and gladly comply with the request.

"The operation in which the anesthetic was administered was performed in the surgical amphitheater of the Massachusetts General Hospital by Dr. John C. Warren, in the presence of a number of distinguished surgeons and physicians, including Dr. Hayward, the elder Dr. Bigelow, one of the wisest and greatest men who have adorned our professorship with their multifarious gifts and accomplishments, and his celebrated son, not then arrived at the zenith of his fame. The Harvard medical class was also present.

"After some delay, Dr. William Morton appeared with his apparatus, when Dr. Warren addressed the medical class, which had not been previously notified of his proposed experiment, stating in substance that there was a gentleman present who claimed that he had discovered that the inhalation of a certain agent would produce insensibility to pain during surgical operations with safety to the patient, and he added that the class was aware that he had always regarded that condition as an important desideratum in operative surgery, and he had decided to permit him to try the experiment.

"The patient, who was a young man, was suffering from a vascular tumor of the neck on the left side, occupying the space from the edge of the jaw downward to the larynx, and from the angle of the jaw to the median line.

"Dr. Morton proceeded to apply to the lips of the patient a tube connected with a glass globe. After the inhalation had continued four or five minutes, he appeared to be asleep, and the operation was commenced and completed without further inhalation of the ether. The operation consisted of an incision about three inches in length over the center of the tumor, and through the skin and subcutaneous cellular tissue, and the removal of a layer of fascia which covered the enlarged blood-vessels. A curved needle, armed with a ligature, was then passed under and around the tumor, and considerable compression was employed. During most of the time occupied by the operation the patient gave no sign of sensibility, and appeared to be sleeping quietly. A short time before its completion he moved his head, body, and limbs, and muttered words which I could not hear distinctly, but upon recovering consciousness he declared that he had suffered no pain, but simply a sensation like scraping the parts with a blunt instrument.

"The exhibition of the anesthetic was admitted by those present to be a complete success. The operating surgeon expressed his satisfaction in these emphatic words: 'Gentlemen, this is no humbug.' From that time forward it became the practise to employ it at the hospital in all operations of importance.

"Dr. Morton continued to administer it until it was proved that it could be easily and safely administered by others. The apparatus which he had used in the first and a few subsequent operations was soon abandoned as unnecessary and a concave sponge was substituted."

The next paper was on

SURGERY BEFORE THE DAYS OF ANESTHESIA,  
by JOHN ASHHURST, M.D., LL.D., of Philadelphia.  
(See MEDICAL NEWS, October 17, p. 433.)



DAVID W. CHEEVER, M.D., of Boston, then took for his topic:

#### WHAT ANESTHESIA HAS DONE FOR SURGERY.

He said:

"What victim of surgery who, under ether, sinks into a calm and dreamless sleep, during which his abdomen can be cut open, his bowels taken out, handled, and replaced, his nerves cut, his veins or arteries tied, and his skin sewed up, and who is made so absolutely oblivious as to ask on awakening: 'Are you not ready to begin?' but concedes with gratitude, on realizing the result, that this is the greatest discovery ever made for the happiness of mankind? In proportion, as anticipation is worse than reality, must be estimated the mental relief brought about by anesthesia.

"To dread the knife, to shrink from an operation, to fear pain, is there a more universal instinct? It is next to the vital instinct of self-preservation. What iron will, what previous agony must induce that fortitude which can bring the sufferer to lie down and be cut without stirring! All this is annulled by anesthesia. Anticipation is done away with, pain is prevented, shock is reduced.

"The patient consents to operation earlier; he does not wait until life becomes unbearable, but calmly contemplates surgery as the natural and easy channel of relief. Hence his chances of benefit from an operation are much increased; he averts destructive processes, shortens disease, is more likely to recover. So much is done for the patient.

"To the surgeon anesthesia gives the patient asleep, motionless, senseless. He need not hurry; he need not sympathize; he need not worry; he can calmly dissect, as on a dead body, heedful only that the etherizer is competent, the breathing and pulse watched, the operation not prolonged beyond the verge of exhaustion. The surgeon, then, can do better work; he can be more careful; he can pause and consider; he can choose his steps; he can be deliberate, if not dexterous. He can even summon the aid of the pathologist and his microscope, who, in ten minutes, while the patient sleeps, can decide the nature, the innocence or malignancy of the tumor he is removing. It is also just to believe that the moral fiber of the surgeon is less strained; judicial callousness is no longer called for; he need not steel his heart, for his victim does not feel. The tyranny of misguided conscience drove the inquisitors of the Middle Ages to rack the joints apart; so, too, the surgeon was formerly obliged to use the rack to tire the muscles and disrupt the capsule to reduce a dislocation. Now, anesthesia relaxes the muscles and manipulation rolls the bones into the socket."

#### ANESTHESIA IN OBSTETRICS,

was next presented by J. P. REYNOLDS, M.D., of Boston. He said:

"In operative obstetrics, in the high and difficult use of instruments, in the introduction of the hand for version and extraction, anesthesia resembles at all points its use in the graver procedures of general surgery.

"Would that any words of mine could bring home, as I feel it, the inestimable blessing of ether in all labor,

silence groundless excuses for its neglect, and so rouse professional interest that no one should lightly forbid it to any woman in childbed!

"Only one rule governs its use. Whenever the attendant sees that the woman's endurance of pain begins to tell upon her patience and courage, the moment for ether has come. It is to be kept up so long as this need lasts; no longer."

W. H. WELCH, M.D., LL.D., of Johns Hopkins University, then read a paper on

#### THE INFLUENCE OF ANESTHESIA UPON MEDICINE.

He claimed that in all the centuries there had been no discovery comparable to any of these great discoveries of the past one hundred years, namely, the discovery of vaccination by Jenner, the discovery of anesthesia by Morton, and the discovery of antiseptics by Lister.

His address was a plea for vivisection and animal experiment, as absolutely necessary for science. In these experiments, he said, artificial anesthesia is an important factor, and many physiological experiments could never have yielded the results they did if it were not for the use of anesthetics, especially when it is necessary that the animal should survive the experiments.

The discovery of anesthesia was made in the only way it could possibly have been made, *viz.*, by scientific animal experimentation. Sir Humphry Davy and Morton both experimented on dogs. It was a triumph of the experimental method. Later animal experimentation with anesthetics has revealed a great amount of knowledge not obtainable in any other way. The gentle killing of bacteria preserves in their bodies certain chemical substances which undergo changes in their sudden death. The great progress which characterizes the history of medicine for the past fifty years, is due entirely to animal experimentation.

The last paper was read by CHARLES MCBURNEY, M.D., of New York, on

#### THE SURGERY OF THE FUTURE.

He said:

"We worship to-day at the shrine of the Goddess Anesthesia, whose gentle sway over the surgical world of all civilized countries has so beneficently displaced the reign of terror which existed only two generations ago. What anesthesia has done for surgery has been already most eloquently told, and we all realize that without it the best of modern work would be impossible. It seems but yesterday, and yet it is a matter of history, that the wonderful discovery of the aseptic treatment of wounds was given to us, through whose agency countless thousands of human lives have been preserved. Through these two discoveries, surgery has become a gentle art; for the agonies of operations and the fatal diseases of wounds have given way to a painless sleep, and an awakening to a safe recovery. And bacteriology, which in its infancy gave birth to aseptic surgery, has penetrated with its brilliant light a darkness which our predecessors believed would last forever.

"The surgeon can to-day prevent the entrance of sepsis through either accidental or artificial wounds, but in the

presence of sepsis already in the system the surgeon stands practically helpless. Infusion of warm saline solutions into the blood-vessels gives promise of a time when we shall withdraw poisons from one part of the body and inject life-giving fluid at another point. Already we can pronounce the dictum that death from hemorrhage is unnecessary. Saline injections not only stop the hemorrhage, but fill the depleted blood-vessels, stimulate the heart, and renew the functions of life.

"The surgery of the future attracts to its enthusiastic study and practise finer and finer men, in whose hands we may safely leave the development of our science.

"A single glance at the faces of the students who collect daily in your operating-room will show you what a change has occurred in the last twenty-five years. For this, too, we must be ever grateful to anesthesia, which, in removing the torture of surgery, has robbed it of what repelled many sensitive natures.

"And the science of asepsis, by rendering complete success in surgical work possible, will excite the most devoted enthusiasm from many scientific men, who soon would have become sick at heart over the failures of former times.

"What more attractive opportunity could possibly exist than will be offered by surgery to the well-educated, refined, able, and ambitious student?"

An original poem, entitled "The Birth and Death of Pain," was then read by S. WEIR MITCHELL, M.D., of Philadelphia.

Forgive a moment, if a friend's regret,  
Delay the task your honoring kindness set.  
I miss one face to all men ever dear;  
I miss one voice that all men loved to hear.  
How glad were I to sit with you apart,  
Could the dead master use his higher art  
To lift on wings of ever lightsome mirth  
The burdened muse above the dust of earth,  
To stamp with jests the heavy ore of thought,  
To give a day, with proud remembrance fraught,  
The vital pathos of that Holmes-spun art  
Which knew so well to reach the common heart.  
Alas! for me, for you, that fatal hour!  
Gone is the master! Ah! not mine the power  
To gild with jests, that almost win a tear,  
The thronging memories that are with us here.

The Birth of Pain! Let centuries roll away;  
Come back with me to nature's primal day.  
What mighty forces pledged the dust to life!  
What awful will decreed its silent strife!  
Till, through vast ages, rose on hill and plain  
Life's saddest voice, the birthright wail of pain.  
The keener sense, and ever-growing mind,  
Served but to add a torment twice refined,  
As life, more tender as it grew more sweet,  
The cruel links of sorrow found complete,  
When yearning love to conscious pity grown  
Felt the mad pain-thrills, that were not its own.

What will implacable, beyond our ken,  
Set this stern fiat for the tribes of men?  
This, none shall 'scape, who share our human fates:  
One stern democracy of anguish waits  
By poor men's cots—within the rich man's gates.  
What purpose hath it? Nay, thy quest is vain;  
Earth hath no answer: If the baffled brain  
Cries, 'tis to warn, to punish—Ah, refrain!

When writhes the child, beneath the surgeon's hand,  
What soul shall hope that pain to understand?  
Lo! Science falters o'er the hopeless task,  
And Love and Faith in vain an answer ask,  
When thrilling nerves demand what good is wrought  
Where torture clogs the very source of thought.

Whatever triumphs still shall hold the mind,  
Whatever gifts shall yet enrich mankind,  
Ah! here, no hour shall strike through all the years,  
No hour as sweet, as when hope, doubt, and fears,  
'Mid deepening stillness, watched one eager brain,  
With God-like will, decree the Death of Pain.

How did we thank him? Ah! no joy-bells rang,  
No psalms greeted, and no poet sang,  
No cannon thundered, from the guarded strand  
This mighty victory to a grateful land!  
We took the gift, so humbly, simply given,  
And coldly selfish—left our debt to Heaven.  
How shall we thank him? Hush! A gladder hour  
Has struck for him; a wiser, juster power  
Shall know full well how fitly to reward  
The generous soul, that found the world so hard.

A solemn hour for such as gravely pause  
To note the process of creation's laws!  
Ah, sure, He, whose dark, unfathomed Mind  
With prescient thought, the scheme of life designed,  
Who bade His highest creature slowly rise,  
Spurred by sad needs, and lured by many a prize,  
Saw, with a God's pure joy, His ripening plan,  
His highest mercy brought by man to man.

The last speaker was Lord Playfair of London.

"I believe I am the only person called upon to speak," he said, "who was not informed of that fact in advance, and therefore, as I am unprepared, what I have to say will be very brief. I feel a great pleasure at being here, because I have taken a deep interest in each step in the discovery of anesthesia.

"I remember well how we welcomed the news from America. One of my most intimate friends was Sir James Simpson, who was not a rival, but a colleague.

"Let me say here that there is no jealousy in regard to this discovery. It is undoubtedly due to the United States.

"The man entitled to the right of discovery is the man who realizes it to the world. The credit of this discovery is undoubtedly due to Morton in the first instance. Sir Humphry Davy made some experiments in this line, but he never realized the importance of ether."

## SOCIETY PROCEEDINGS.

### AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

*Ninth Annual Meeting, held in Richmond, Va., September 22, 23, and 24, 1896.*

(Continued.)

A. H. CORDIER, M.D., of Kansas City, Mo., read a paper on

MOVABLE KIDNEY; LOCAL AND REMOTE RESULTS.

He drew the following deductions: (1) A movable kidney often produces a dilatation of the stomach, with all



the accompanying symptoms of a disease of that organ.

(2) It is a fruitful source of gall-stones, because of the pedicle producing a partial obstruction of the common duct. (3) The bending of the ureter often gives rise to a hydronephrosis. This, in turn, is sometimes converted into a pyonephrosis. (4) It may produce death by causing a torsion of the vessels and ureter. (5) By dragging on the abdominal aorta and kinking the vena cava a condition simulating an aneurism of these vessels may be produced. (6) Pain which is referred to the region of distribution of the spinal nerves is often induced by a movable kidney's disturbance of the abdominal brain. (7) A general nerve-exhaustion (neurasthenia) is often induced by the interference of this condition with digestion, assimilation, and elimination. (8) Nephrorrhaphy is a safe and effective surgical procedure. (9) All cases of movable kidney, if accompanied by symptoms pointing to the kidney as their source, should be operated on. (10) In summing up the local and remote results of this now often recognized condition, the author thinks the correctness of the deductions has been frequently demonstrated by the disappearance of each and every symptom after a restoration and retention of the kidney in its normal position. (11) The physical examination is the only trustworthy guide in making a diagnosis of movable kidney.

HUGH M. TAYLOR, M.D., of Richmond, Va., read a paper on

#### THE LIMITS OF NEPHRORRHAPHY.

He favors the classification of nephroptosis under three clinical heads: (1) Patients who have displaced kidney, do not know it and suffer no inconvenience whatever from it. This type he thinks represents by far the largest class. (2) Patients with displaced kidney, who may or may not know it, who suffer from gastroenteric discomfort, and perhaps, a long train of vague neurotic disturbances. In this type he thinks we find the largest class calling for operative interference. (3) Patients with movable kidney who are subjects of occasional, or frequent mild or severe attacks of renal crisis. This last-mentioned is, he thinks, the least frequent type met with, but the urgency of the symptoms more frequently demands operative interference.

Nephrorrhaphy, for the relief of gastroenteric disorder, is limited by our ability to tell to what extent the disorder is due to renal ptosis *per se*, or to enteroptosis, or to some one of the many well-known etiological factors of gastroenteric disorders. Nephrorrhaphy, for the relief of the condition of Deitl's or renal crisis, must be limited by one's success in differentiating between this condition and that of gall-tract, appendicular, and kidney colic, due to nephrolithiasis. He accepted as logically sustained the conclusion that the Deitl's or renal crisis is due to a kink or twist of the ureter, with retained urine in the ureter, and pelvis of the kidney. Apart from the violent paroxysms of pain (the renal crisis), the tendency of ureteral twist and urinary obstruction to induce hydronephrosis, and, in exceptional instances, pyonephrosis, rendered operative interference more imperative in this class of cases.

His protest was not against nephrorrhaphy, but only its

abuse. He conceded the value of operative interference in many selected cases, but deprecated the tendency toward operative interference merely because the kidney is movable.

DR. GEORGE BEN JOHNSON of Richmond, Va., had operated for movable kidney in three cases with most gratifying results.

DR. L. H. DUNNING laid great stress upon the importance of differentiating between floating and movable kidney, the former being always congenital, the latter acquired to a greater or less extent. The two principal causes of the partially fixed condition of the kidney were its position behind the peritoneum, and the fact that it had an envelope of cellulo-adipose tissue. The perinephritic cellulo-adipose tissue was composed of two parts, one fixed, the other movable. The normal kidney had a range of motion of from one-half to three-quarters of an inch in its fatty envelope.

DR. THOS. B. EASEMANN of Indianapolis reported the case of a woman, twenty-five years of age, who came to him with the symptoms of appendicitis. She also had considerable albumin in the urine. Operation showed that the appendix was firmly adherent to the kidney. It required considerable force to liberate it. As soon as liberated the kidney bounded back into place as though it were rubber. The appendix was removed, the albumin in the urine ceased, and the woman made an uneventful recovery.

DR. JAMES MCFADDEN GASTON of Atlanta directed attention to the possibility of movable kidney being mistaken for enlarged gall-bladder. The gall-bladder is capable of being pushed back into the lumbar region, and carried around in front in just the same manner as a floating kidney.

DR. J. S. STONE of Washington, D. C., related a case of a woman who, after the operation of nephrorrhaphy had been performed, gained twenty-five pounds in flesh. In many instances this procedure brought color back to the cheeks of patients and made them feel well.

DR. JOSEPH PRICE said that his experience had been somewhat limited in operating for movable kidney. The improvement in the condition of patients so operated upon was rapid, but there was such a thing as operating too much in these cases.

DR. J. HENRY CARSTENS of Detroit said, the line should be drawn between movable and floating kidney. The trouble which arose from floating kidney consisted of a twisting of the ureter and consequent obstruction.

W. E. B. DAVIS, M.D., of Birmingham, Ala., read a paper on

#### TREATMENT OF PERIUTERINE SEPTIC DISEASES.

Only recently has the extremely radical procedure of hysterectomy been practised in this country for septic diseases of the internal genitals. A wave, which had its origin in Paris at the hands of Péan, aided by Richelot, Segond, Jacobs, and others, reached our shores three years ago, and has found a considerable following among our leading operators. The claim is made that there is no use in leaving the uterus after the removal of the ap-

pendages; in every operation for septic diseases of the female generative organs, which demands the removal of the tubes and ovaries, hysterectomy should also be performed, unless there are plain contra-indications forbidding it. It should be the aim of the surgeon to preserve everything consistent with thorough surgical work, and not to sacrifice important organs because it can be done with only a small mortality. The sexual life of the woman is very much better preserved by leaving the uterus, and the mental effect is also much better. A slow convalescence, or even a second operation, is preferable to its removal unless very much diseased. As stated by Dr. Davis at the last meeting of the American Medical Association, he could not agree with Dr. Sutton and others that pus in the tubes was due to gonorrhea in seventy-five per cent. of cases. He thought that puerperal infection was the cause of more than fifty per cent. Tubercular infection was rarely the cause, and was not so important as had been claimed. However, the importance attached to gonorrhea was against the argument for the removal of the uterus, as the infection from this source was not deep and could be removed with the curette. Because some patients were not completely cured by the removal of the appendage, was no argument for hysterectomy in every case where the bilateral operation was required; for nearly all these could be relieved by a thorough curettage.

Vaginal incision for the drainage of pus in the pelvis, not confined to the tubes, was a most valuable method of treatment in a well-recognized class of cases, and had been practised for a long time with gratifying results. A large number of these cases required no further surgery. More recently large pus-tubes and ovarian abscesses had been incised and drained through the vagina with permanent recoveries in a large proportion of cases. The uterus should always be curetted at the same time. These were the very cases where the vaginal operation and hysterectomy had been recommended so highly by the French surgeons. Yet a considerable percentage of these cases could be relieved by vaginal incision and drainage. The object of the surgeon should be, not so much toward still further reducing the death-rate from the operation, but to relieve the cases and preserve, as far as possible, organs which had so much to do with the woman's health and happiness.

L. H. DUNNING, M.D., of Indianapolis, read a paper entitled

#### SHALL HYSTERECTOMY BE PERFORMED IN INFLAMMATORY DISEASES OF THE PELVIC ORGANS?

The author discussed only diffuse pelvic inflammation.

He recognized the utility of hysterectomy in a small percentage of cases of bilateral suppuration of the tubes and ovaries in which the uterus is distinctly septic, and in cases of septic uteri, which cannot be cured by other means after bilateral salpingo-oophorectomy.

He opposes hysterectomy as a rule.

E. F. FISH, M.D., of Milwaukee, Wis., read a paper entitled

#### SHALL THE UTERUS BE LEFT IN SITU IN EXCISION OF THE ADNEXA?

He argued against all operations which leave a degenerated uterus, such as Hegar's, Tait's, Martin's, and Robinson's, except under extreme conditions, and concludes thus: (1) That whenever it becomes necessary to excise the uterine adnexa, if the uterus is sound, leave it. (2) Whenever we excise the tube and ovaries, and the uterus, though in a pathological condition, in our judgment will yield to treatment, leave it. (3) Whenever it is necessary to do an abdominal hysterectomy-salpingo-oophorectomy and the cervix is healthy, do a supravaginal amputation, as this leaves the vaginal vault intact. (4) Whenever it is necessary to do a supravaginal amputation, suspend the cervix to the stumps of the broad ligaments, or anchor it to the abdominal wall, to prevent prolapsus vaginae. (Baldy.) (5) Whenever it is necessary to do a general ablation, and the cervix uteri is unsound, take the entire organ because of the danger of carcinoma. (6) Whenever a subserous or interstitial myoma can be removed without too great damage to the uterus, do a myomectomy and leave the organ. (7) Whenever we excise the appendages and leave the uterus, ventral fixation is not an unsurgical operative conclusion. The author's reasons for leaving the uterus were: (a) That it helps to maintain the woman's sexual integrity. (b) It relieves the patient of much mental strain, and is a prophylactic measure to neurasthenia, melancholia, and insanity. (c) It tends to maintain the family ties unstrained. (d) It obviates the possibility of vaginal hernia, cystocele, and rectocele, and delays vaginal atrophy, and last of all, it holds up and prevents shortening of the vagina.

A spirited discussion followed the reading of the above three papers.

J. W. LONG, M.D., of Richmond, Va., contributed a paper entitled

#### DYNAMIC ILEUS.

The following is a report of one of Dr. Long's cases: Mrs. C., was brought to him on May 27, 1896. She is twenty-one years old, married three years, but never pregnant. It was with great difficulty that she could be induced to have any local treatment or even take her medicines. Early in the April of this year, the patient had malaria, followed by delayed menstruation, pelvico-abdominal pain, and obstinate constipation. The malaria and menstrual disturbance yielded promptly to treatment, but the abdominal pain continued, and gradually the ileus symptoms became more and more pronounced. After exhausting every other measure to move the bowels, the patient was given chloroform, and by means of a Rickett's tube he succeeded in washing away a quantity of fecal matter. There was no improvement, and a marked degree of tympany supervened. When she was brought to the hospital, there had been no movement of the bowels for four weeks, fecal matter being washed away with the colon-tube while the patient was anesthetized. The history justified the diagnosis of intestinal obstruction, while the urgent symptoms demanded an immediate operation. The abdomen was opened by a median incision. No mechanical obstruction could be found, although a careful search was made along the whole



length of the intestine. The bowel was moderately distended with gas and congested. At three points, two in the ileum and one in the sigmoid flexure, the canal was constricted sufficiently to constitute obstruction. In the ileum, one of the constrictors was about fifteen inches from its lower end and six inches long, the other was near the jejunum and about four inches long. The lumen was not entirely closed at either point, but was greatly reduced, being less than half the normal size, while the diameter of the remaining portions of the bowel was increased on account of the distention with gas. No peristalsis was observed, but the contracted portions could be dilated by "milking" the intestinal contents along. In the sigmoid, the limitations of the contracted portion were not so sharply defined, but the lesion was just as evident. The walls were thickened and the caliber much diminished. Incidentally, a small ovarian cyst on the right side was discovered and removed. As the intestine had been handled a good deal, the abdomen was flushed with normal salt solution. The incision was closed with two tiers of sutures, silk for the peritoneum, and interrupted silver wire for the remaining layers. The recovery ere most satisfactory in every way. The bowels responded to the usual laxatives and enemas on the second day, and from the first to last there was not a hitch in her convalescence. The patient left the hospital in four weeks, and three weeks thereafter took a trip to Alabama. There could be discovered no evidence of lead or ptomain poisoning.

B. M. HYPES, M.D., of St. Louis, read a paper on  
SPONTANEOUS RUPTURE OF UTERUS DURING LABOR  
AT TERM, WITH SPECIMEN.

Mrs. O., aged thirty-one, of German parentage, general health good, previous to birth of first child. No history of any constitutional disease. After the birth of her first child, which lived but a few minutes, she suffered for six weeks from a severe case of metro-peritonitis. For the next few years she was a sufferer from general debility, impaired digestion, and a "sore spot" in the hypogastrium. Four years from the birth of her first child she again became pregnant. During gestation, her general health was much improved. She exhibited no functional disturbances; her only complaint was the sore spot over the fundus of the uterus and to the right of the median line. Labor pains began September 16, 1895, at 10 P.M., at full term. The family physician was called; found labor in progress, vertex presentation, with normal condition of mother and child. The pains were slight and progress slow. At 2 A.M., September 17th, he gave a dose of morphin and went home. At 9 A.M., upon his return, he found the patient comfortable, with occasional slight labor pains. He left the house with injunction to call him when signs of labor became pronounced. Patient remained quiet during the day. Suddenly, at 3 P.M., she was seized with violent vomiting, and the usual symptoms of abdominal shock. The family physician was at once sent for, and upon his arrival at 4 P.M. found her in complete collapse, with convulsive seizures. The patient had suffered spontaneous rupture of the uterus. He at once dispatched for surgical aid, but by

the time the surgeon, Dr. Meisenbach, arrived, the patient was moribund. Laparotomy was hastily performed, and the child, which had escaped entirely into the abdominal cavity, was extracted from a mass of blood and amniotic fluid. It had ceased to live, and continued efforts at resuscitation failed to cause it to breathe. The child was fully developed, male, weighed six pounds, and was eighteen inches long. The uterus, when removed from the body, presented the following condition: A rupture through fundus, superiorly, extending half an inch from the entrance of one tube to an equal distance from the entrance of the other; the walls, at place of rupture, were comparatively thin. Placenta located at middle third of uterus, anteriorly, and to the right, where the walls were much thickened. Vaginal portion of the cervix almost obliterated as at term, and dilated for the ready admission of two fingers. The lower zone of the uterus exhibited no thinning or formation of Bandl's contraction-ring; no disease of tubes, ovaries, or placenta. A microscopical examination was made soon after rupture, and revealed fatty degeneration of tissue at point of rupture. The points of unusual interest in the case are the cause of the rupture, and its location at the fundus uteri.

EDWIN RICKETTS, M.D., of Cincinnati, O., read a paper entitled

PORRO'S OPERATION AT OR NEAR THE FIFTH MONTH  
FOR SMALL FIBROID OF CERVIX, ACCOMPANIED BY  
HYDRAMNIOS AND TOTAL RETENTION OF URINE.

The author reported the following case: Mrs. M., white, aged twenty-six, of short stature, mother of two children of six and three years of age, with an abortion at eight weeks early in 1895, no specific history. From January 10, 1896, she had no desire to urinate, nor could she void a drop of urine without the aid of the catheter. On February 23, 1896, she had severe labor pains lasting thirty-six hours, and accompanied by slight hemorrhage, the right portion of the cervix being soft and the left hard, which condition was also present at the time of operation. During April and until May 22d, the date of operation, she was very tender over the lower part of the abdomen, and at times had a temperature above 100°, with a pulse running from 90 to 100. On May 22d her abdomen was found to be larger than it should be at full term, which was due to the hydramnios present. There was no difficulty in moving the fetus freely in the abdominal cavity, so thin was the uterine wall. It was considered unwise to delay surgical interference, and a Porro operation was therefore performed under as strict asepsis as the circumstances would permit. After the abdomen was opened, Dr. Ricketts passed his hand down into the pelvis, breaking up the pelvic adhesions. Upon the delivery of the fundus of the impregnated uterus through the abdominal incision, a rubber ligature was thrown around it, low down and tight enough to control any hemorrhage which might occur. The fluid which escaped, upon opening the uterus, surpassed in amount any he had seen delivered per viam naturalem. After carefully sponging the parts, the wire was tightly adjusted below the rubber ligature by means of the Koeberle clamp, and the rubber ligature then removed. After the delivery of the placenta

the fundus was amputated, leaving the ovaries and tubes intact. The abdominal wound was closed with silkworm-gut sutures, without stitching any tissue to the stump below the wire. No drainage-tube was used. The extra-peritoneal part of the stump was dressed with gauze, moistened in glycerin and tincture of iron, the stump being held up by the double-hooded pin of Tait. The placenta and fetus were small for a gestation of nearly five months, and the cord was tied in almost a hard knot—harder than any he had seen. The fetus had marked cyanosis and gasped but once. Recovery of the mother was satisfactory.

H. W. LONGYEAR, M.D., of Detroit read a paper on  
TREATMENT OF PUERPERAL INFECTION.

He spoke of the treatment of infection from abortion and from childbirth at full term, and presented an instrument for use in removing the remains of secundines from the uterus, designed by him. He also exhibited a self-retaining drainage-tube of his own invention. He reported two cases of puerperal infection treated successfully by the use of diphtheria antitoxin serum. He condemned the performing of hysterectomy for puerperal septicemia, except in very exceptional cases.

WM. G. MYERS, M.D., of Fort Wayne, Ind., read a paper entitled

ATRESIA WITH RETENTION OF THE MENSES: TREATMENT.

He reported two cases of atresia, one with absence of the vagina and uterus, and the other with retained menstrual fluid. The last was operated upon successfully. He believes that in the case of atresia of the vagina, with retention of menstrual fluid in the uterus, an operation ought to be completed at one sitting, adopting the direct method.

JOSEPH PRICE, M.D., of Philadelphia, delivered the President's address on

PRINCIPLES AND PROGRESS IN GYNECOLOGY.

GEORGE H. ROHE, M.D., of Sykesville, Md., read a paper on

SOME CAUSES OF INSANITY IN WOMEN.

At the period of puberty menstrual derangements are not infrequently causative of mental disturbances, which do not yield until the menstruation becomes normal. In the puerperium, insanity is dependent upon septic absorption, or the consequences of other morbid conditions of the reproductive organs. Lactational insanity may be due to physical exhaustion, but in some cases pathological conditions of the genitals or of the breast seem to have an etiological relation. At the menopause the disturbances of nutrition, associated with the arrest of menstruation, often produce insanity, and in many of these cases there will also be found abnormal alterations of the reproductive organs. The insanities following gynecological operations are either due to septic conditions, or are merely due to the rapidly induced menopause. Their frequency has been much exaggerated.

WALTER P. MANTON, M.D., of Detroit, Mich., read a paper on

THE RELATION OF VISCERAL DISORDERS TO THE DELUSIONS OF THE INSANE.

That the delusions of the insane are often an expression of somatic peripheral irritation has long been recognized, but observation leads him to believe that the importance of these mental manifestations, as indices of bodily suffering, was frequently ignored as a mere phase of the brain-disorders, especially in the instance of supposed fancied visceral disturbances.

He reported interesting cases. In each of the patients the delusions referred chiefly to the abdomen, and in each an abnormal condition of some of the viscera was found, but a condition in which the early intervention of surgery would have afforded great, if not permanent, relief to the sufferings of patients. Laparotomy, in properly selected cases of the insane, in whom visceral delusions are a pronounced and constant feature of the mental disorder, was not only justifiable in his opinion, but urgently demanded in the interest of the patient.

DAVID T. GILLIAN, M.D., of Columbus, O., read a paper entitled.

OÖPHORECTOMY FOR THE INSANITY AND EPILEPSY OF THE FEMALE: A PLEA FOR ITS MORE GENERAL ADOPTION.

He showed that oöphorectomy was a logical and legitimate operation for the epilepsy and insanity of the female. Insanity is hereditary, as is also epilepsy. They constitute the greatest curse to humanity. He would limit the operation to those in whom the malady appears in some way to be connected with or dependent on sexual disturbance. He would go further and include all who were willing to undergo the operation to save themselves and their offspring from the miseries which awaited them.

J. F. BALDWIN, M.D., of Columbus, O., read a paper on

TREATMENT OF THE STUMP TO PREVENT ADHESIONS.

He estimated that about one per cent. of all cases operated upon die from intestinal obstruction, the result of adhesions to the stump. To diminish as much as possible the danger of adhesions, he recommended the careful closing in of stumps by a peritoneal flap, and described the method of securing this flap. In cases where the pedicle is, after a simple ovariectomy, not too large, he recommended that the pedicle be so ligated that the ends of the ligature were on the anterior face of the pedicle; that the ends of the ligature be then carried across the face of the stump, down and through the broad ligament, transfixing the ligament from behind forward. The ligatures should be passed through, about half an inch apart. As the ends are drawn through and tightened, the raw end of the stump is rolled down and under the broad ligament, so as to be entirely protected. He used this method in a large number of cases, and with entirely satisfactory results.

THOMAS E. MCARDLE, M.D., of Washington, D. C., read a paper on

ABDOMINAL SECTION FOR TUBERCULAR DISEASE.

The treatment of tuberculosis of the vulva, vagina, and



cervix, did not come within the scope of the paper. The destruction of the tuberculous focus by fluid or solid caustics had been advocated by some surgeons, and if these means were not satisfactory, extirpation of the part was recommended. We had a very efficient means for the removal of the tubercular ulcers of the vagina and vulva in the application of the tincture of iodine. They rapidly disappeared under its use. In case of failure, however, excision could be practised. When the cervix is involved, and not the body of the uterus, the method of treatment advised for the vulva and vagina should be given a fair trial, but if they prove ineffectual, no time should be lost in amputating the cervix. When the endometrium is involved, there is a diversity of opinion as to the best method of procedure. It has been recommended first to curette the organ and remove all evidence of disease. The iodoform suppositories are introduced into the uterus. If there should be a recurrence of the trouble, removal of the organ is advised. Having once ascertained the existence of tubercular disease in the uterus, it is our duty to look for a similar condition in the tubes and ovaries, and, if found, it behooves us to waste no time in curetting the uterus and treating it with iodoform, but to proceed at once to the performance of an abdominal section for the removal of the uterus, tubes, and ovaries. This heroic method of treatment is advocated in primary disease of these organs. In cases complicated with tubercular peritonitis, there would be no special danger in removing the tubes and ovaries. We all know how many cases of that disease have been cured by section and drainage. We could then curette and treat the body of the uterus.

CHARLES A. L. REED, M.D., of Cincinnati, O., read a paper on

MELANO-SARCOMA OF THE FEMALE URETHRA;  
URETHRECTOMY; RECOVERY.

Mary E. Y., aged sixty-four, single, was brought to his private hospital December 3, 1895. The patient had had no previous serious illness. There was no history of tuberculosis or syphilis in the family. The virginal condition of the genitalia precluded the supposition of venereal infection of any character. Her general health was good, although there was some emaciation about the neck and breasts, the latter of which were flabby—changes no doubt incident to age. Careful examination revealed no diseased conditions about either the lungs or heart. Careful palpation and percussion of the abdomen yielded negative results. About eight months previously—i.e., in April, 1895—she began to notice some pain accompanied with blood on micturition. This was shortly followed by a more or less constant pinkish discharge from the genital fissure. The self-examination which followed revealed a tumor at the meatus urethrae. This tumor continued to increase in both size and hemorrhagic tendency until she was prompted to consult Dr. Morris, who curetted the neoplasm thoroughly, and treated it with styptics. When the patient came under Dr. Reed's care, he found a black lobulated and eroded mass, about three centimeters in diameter, separating the labia majora. The orifice of the urethra was in the very center of this mass. A careful vaginal examination was made at the time, as the virginal

structures, present in their integrity, rendered such an operation very painful. Operation was done the next day, December 4th. The small blade of a Jones' speculum was introduced; the patient being in the Simon's posture, the urethra was by this means exposed in its entire length. A longitudinal incision was made through the mucous membrane along the dorsum of the urethra, from a point where the presenting part of the mass was eroded to the base of the bladder. Another incision through the mucous membrane was made at right angles to the foregoing at a point far enough above the eroded mass to insure healthy tissue. The mucous membrane was then dissected back in two lateral flaps, and the urethra was enucleated. The urethra was found to be distinctly conical in shape, the base of the cone being at the meatus, the apex at the bladder. Care was taken to dissect out the canal to a point manifestly above the zone of malignant involvement. When this point was reached, but a slight distance from the bladder, the canal, with the neoplastic walls, was excised. The cut margin of the cystic segment of the canal was seized at various points in its circumference by Kocher's forceps, brought down by gentle traction, and fixed by interrupted sutures of silkworm-gut to the vaginal mucous membrane. A self-retaining catheter was inserted, and the patient was put to bed. The sutures were removed on the eighth day. The catheter was dispensed with on the twelfth day. The patient sat up on the fourteenth day, when she found that she could retain her urine and void it at will. She was dismissed December 21st, entirely healed. She remained in good health until the 1st of July following—seven months—when she again summoned Dr. Morris because of some gastric symptoms. He found her suffering from persistent vomiting, and with a large mass in the epigastrium. This mass rapidly increased in size until it occupied all the area between the navel and the breastbone, its nodular characteristics becoming more and more pronounced. She died of exhaustion July 14, 1896, having had no recurrence whatever of the urethral trouble. No autopsy was permitted.

J. B. MURPHY, M.D., of Chicago, addressed the Association on

THE SUTURE OF LARGE VESSELS INJURED IN  
OPERATIONS.

His own researches and operative work lead him to believe that, where a large vessel is injured in an operation by a transverse division, not exceeding two-thirds of its circumference, the surgeon can resort to immediate suture without resection, and, if the field of operation be aseptic, can feel more certain that he will have union of the vessel and continuation of the current than he could where he sutures the intestine as for the resection of the bowel. He believes from his observations that the chances are better with the suture. The importance of this concerned surgeons more in the treatment of aneurisms. Coming to the question of stab- and bullet-wounds of the extremities, he said there was a great field for improvement in our past operative work. Formerly, we ligated vessels, and when this was done the inevitable result was death of the limb. He believes that now such limbs can

be uniformly saved, particularly in the aseptic cases. With his present method of suturing large vessels, he is not afraid to suture any vessel in the body, feeling confident that adhesion or union will take place.

W. G. MACDONALD, M.D., of Albany, N. Y., read a paper on

#### CONTUSIONS OF THE ABDOMEN.

Contusions of the abdomen are always grave injuries. The question of surgical intervention, although much discussed, cannot be regarded as satisfactorily settled. Seven cases of traumatic rupture of the stomach and small intestine are reported. Two operations were undertaken, one recovery, one death the eighth day after operation from second rupture. All the inoperative cases died. Reference is made to the general absence of evidence of contusions in the abdominal walls, when serious visceral injury has occurred. Very slight causes, particularly if the intestinal canal is distended with fluids, may produce intestinal rupture. The early symptoms of intestinal laceration are not always distinctive. An analysis of two hundred cases of intestinal laceration, as associated with abdominal contusion, was made with a view to determine the symptoms. The following topics are considered the important ones: History of the nature of the injury, shock or collapse, pain, vomiting, pulse, temperature, and physical signs. That careful investigation of a given case will usually show sufficient symptoms to make an early exploratory abdominal section imperative.

The following officers were elected: President, Dr. James F. W. Ross, Toronto, Canada; secretary, Dr. Wm. Warren Potter, Buffalo, N. Y.; treasurer, Dr. X. O. Worder, Pittsburg, Pa.

The next meeting will be at Niagara Falls, N. Y., August 24, 25, and 26, 1897.

## REVIEWS.

**DIAGNOSIS AND TREATMENT OF DISEASES OF THE RECTUM:** Being a practical treatise on Fistula, Piles, Fissure and Painful Ulcer, Proctiditis, Polypus, Stricture, Cancer, etc. By WILLIAM ALLINGHAM, F.R.C.S., Eng., and HERBERT W. ALLINGHAM, F.R.C.S., Eng. Sixth edition. William Wood & Co., 1896.

THE name Allingham has been so intimately associated and for so long a time with the treatment of diseased conditions of the rectum, that an enlarged and improved edition of this work is a welcome contribution to the subject. The subjects treated in the book are attracting constantly increasing interest and more definite and scientific attention from year to year. As is truly said in the introduction, a majority of these affections are very amenable to proper treatment. The amount of relief afforded sometimes by a most simple treatment or surgical procedure is most surprising and gratifying. The importance of administering an anesthetic for the purpose of thorough and careful diagnosis is wisely insisted upon.

The various operations for hemorrhoids are fairly and fully described, but the authors reassert the opinion that

the ligature is the best and safest operation for the great majority of cases. Whitehead's operation for hemorrhoids is criticised, and the assertion is made without hesitation that, though theoretically it is perfect, yet in practise it is unnecessary, and one of the worst operations for piles. The experience of many skilful surgeons in this country would hardly corroborate this opinion. Indeed, with proper modifications of the original procedure, as described by Whitehead, there is no reason why it may not be as perfect in practise as it is in theory. Even in this, the sixth edition, there is little attempt made to improve upon the early style in which it was written, and the reports of cases that are presented read vastly like advertisements of patent medicines in the daily papers. Some valuable recent contributions to the study of these diseases are not mentioned. No reference whatever is made to Howard Kelly's method of examining and treating the rectum.

**A MANUAL OF CLINICAL DIAGNOSIS BY MICROSCOPICAL AND CHEMICAL METHODS.** For Students, Hospital Physicians, and Practitioners. By CHARLES E. SIMON, M.D., Late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one very handsome octavo volume of 504 pages, with 132 engravings and 10 full-page colored plates. Cloth, \$3.50. Lea Brothers & Co., Philadelphia and New York. 1896.

THE practice of medicine nowadays is a true science and art. "Diagnosis" is the most important subject of medical knowledge. Chemistry and bacteriology have recently given us aid of incalculable value in establishing a diagnosis with scientific precision. Those fruits, however, should not be left for a few experts alone, but should become the common property of the entire medical profession. With this aim in view, Simon has written this excellent work, which gives, in clear language and concise words, all the new methods of bacteriological, as well as chemical, investigations necessary for the practitioner. The chapters on "blood," "sputum," "gastric contents" and "urine" are treated in a masterful way, which can hardly be excelled. Many of the methods described are original. The illustrations, many of them in colors, are beautifully executed and of incalculable assistance to the practical worker. The book possesses the attractive features of freshness, clearness, and originality—a guaranty of wide circulation and great usefulness.

**PTOMAINS, LEUCOMAINS, TOXINS, AND ANTITOXINS; OR THE CHEMICAL FACTORS IN THE CAUSATION OF DISEASE.** By VICTOR C. VAUGHAN, Ph.D., M.D., Professor of Hygiene and Physiological Chemistry, and FREDERICK G. NOVY, M.D., Junior Professor of Hygiene and Physiological Chemistry in the University of Michigan. New (3d) edition. In one 12mo. volume of 603 pages. Cloth, \$3.00. Philadelphia: Lea Brothers & Co. 1896.

THE first edition of this book appeared in 1888 and the present is the second edition since that time—evidence that the work has been favorably received. And so it



should be, for the subject-matter treated is of the utmost importance to those interested in the intimate nature of the processes of infection. The "mechanical interference" theory of infection was never a satisfactory one, but for a time was practically the only one. During the past few years, as a result of laboratory methods of investigation, we have come to look more and more upon the clinical and pathological manifestations of infectious processes as the outgrowth of various kinds of intoxications, or, perhaps better, as in most cases the result of the direct action upon the tissues of poisons, either contained in the protoplasmic bodies of bacteria themselves, or eliminated by the bacteria in the course of their growth. In other words, infection now seems to be a chemical phenomenon. Still another important advance has been made in the means of combating these processes. It has been found that by particular manipulations animals may be rendered tolerant to the poisons of infection and that in some cases such animals contain in their circulating fluids antidotes to the poisons to which they have acquired a tolerance—in other words their body-fluids, especially the serum of their blood, are "antitoxic." This latter observation has already proven to be of the greatest therapeutic importance in certain instances, and as investigations are continued in this direction the field of usefulness will undoubtedly be broadened. To all interested in this subject, and it goes without saying that every student of medicine should be included in this category, the book of Vaughan and Novy will be of the greatest assistance. It presents in a concise way the latest views on the subject, bringing together the more important studies on which the opinions of to-day have been formulated. The chapter (Chap. II.) on the history of the development of our knowledge of bacterial poisons is especially interesting; as is also the chapter (Chap. V.) on the relation of bacterial poisons to infectious diseases. We cannot agree with the authors (Chap. VIII., p. 234) that "exposure to a given disease for successive generations is one of the factors in the evolution of natural immunity," for we do not believe that natural immunity has evolved, but rather that it is a property inherent to the idioplasm of the species endowed with it. There is no evidence of its having been acquired. To use the author's own illustration, p. 232, the chick that is immune to anthrax is in this particular just like every other chick, the world over; its immunity to this disease is a species-characteristic that is natural to it, and has probably always been so; at least there is no proof to the contrary. The community of human beings that for successive generations has been exposed to some particular form of disease and has finally become less susceptible, and, indeed, as in a few individual instances, totally immune, has *acquired* a trait that is *not* a natural characteristic of the *species*, for the balance of the species still retains its normal susceptibility to that malady. We cannot say that man is *naturally* immune to syphilis or yellow fever because we find in certain localities individuals who, because of the constant exposure of themselves and their progenitors to these troubles, have acquired a condition of increased resistance to them. To say that a

person is naturally immune to a disease, because of the increased resistance afforded to him by a single non-fatal attack, would manifestly be absurd; and to admit that natural immunity, in the strict sense in which the term is understood by the reviewers, represents often all the inheritance of an induced peculiarity, is to admit in general the possibility of the hereditary transmission of acquired traits, an assumption that, according to Weismann, "has often been made but never yet proved."

To the student of medical jurisprudence the chapter (Chapt. XI.) on the importance of bacterial products to the toxicologist, will prove profitable reading.

A useful feature of the work is the full bibliography, which appears in the form of an appendix.

**THE READY-REFERENCE HANDBOOK OF DISEASES OF THE SKIN.** BY GEORGE THOMAS JACKSON, M.D., Professor of Dermatology, Woman's Medical College of the New York Infirmary and in the University of Vermont; Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. New (2d) edition. In one 12mo. volume of 589 pages, with 69 illustrations and a colored plate. Cloth, \$2.75. Philadelphia: Lea Brothers & Co. 1896.

THE appearance of a second edition, is, in a measure, a refutation of any adverse criticism that may have been accorded the original. When, however, the author and publisher combine in pointing out the superiority of the rewritten work, one must judge that room for improvement had existed. In dermatology, however, changes of belief are frequent, and new names, if not new diseases, are constantly arising. The author is therefore justifiable in making alterations and improvements. In the work now presented these are noticeable at frequent intervals through the text, and also in the matter of illustration, of which some twenty new ones have been added. In the additions of new subjects are to be noted chapters on actinomycosis, angioma serpiginosum, Baelzer's disease, dermatitis repens, multiple, benign, cystic epithelioma, porokeratosis, and a number of others.

The text, as a whole, has been considerably increased.

In a "ready-reference" handbook the alphabetical arrangement has advantages over many of the older classifications and lends no element of confusion to the student in a subject which is generally supposed to be confusing enough at best. Synonyms being given, as the names occur in turn, adds a glossary-like element, which must often be of decided value. Tables of differential diagnosis scattered here and there offer a quick way of getting at points of doubt. In an appendix a long list of formulae are given. The size, general appearance, and usefulness of the book have all been increased and Dr. Jackson is to be correspondingly congratulated.

**CHEERFUL PHILOSOPHY FOR THOUGHTFUL INVAILDS.** BY WILLIAM HORATIO CLARKE. E. T. Clarke & Co., publishers, Reading, Mass.

THIS little volume of forty-one pages, as its name indicates, is addressed to those afflicted ones who have been compelled to give up the activities of life and be confined

to the narrow limits of the sickroom. Its purpose is to fill the hearts of these sufferers with courage and make them feel that their lives still may be useful not only in development of their own characters, but in influencing and blessing other lives that are brought into contact with theirs. It certainly shows that there is a bright side to even an invalid's life, and no doubt will help many such to take heart.

**BRAITHWAITE'S RETROSPECT OF MEDICINE.** January to June, 1896. Simpkin & Co. G. P. Putnam's Sons, American publishers.

THIS volume appears in its usual form, and covers quite fully the whole range of medicine and surgery. Considerable space is given to the antitoxin treatment of diphtheria and serumtherapy generally.

**USES OF SUFFERING.** By G. W. H. KEMPER, Member of the Delaware County (Ind.) Medical Society. 1896.

THIS little book of fifty-six pages, bound in cardboard cover, consists of a number of short essays, which the preface describes as a "plea for the goodness of God as manifested in disease and suffering." The publication is made at the request of a number of friends—evidently personal and admiring friends. The reader will not question the prefatory statement that they were written amid inconvenient and distracting cares, and "always within earshot of some sufferer."

**A TEXT-BOOK UPON THE PATHOGENIC BACTERIA FOR STUDENTS OF MEDICINE AND PHYSICIANS.** By JOSEPH MCFARLAND, M.D. Cloth, 359 pages, with 113 illustrations. Philadelphia: W. B. Saunders, 1896.

THE professed purpose of this book is to present to the student and medical body a concise account of the technical procedure necessary in the study of bacteriology, a brief description of the life-history of the important pathogenic bacteria, and a short account of the lesions accompanying the microorganismal invasion. As would be expected from the title, many interesting bacteria and protozoa are not considered.

The subject matter is divided into two parts. Part I consists of thirteen chapters, in which are considered topics on general bacteriology and technic, including the biology of bacteria, their cultivation, immunity, sterilization, disinfection, experiments upon animals, and the bacteriological examination of air, water, and soil. Part II, which occupies a major portion of the book, deals with the specific diseases and their bacteria.

These various subjects are treated in a very interesting style, especially for those who desire to acquire a general knowledge of the subject of bacteria and the rôle they play in the causation of disease. From the standpoint of a text-book for students, it is less fortunate. There is a looseness in the use of technical terms which tends to confusion rather than to definiteness. There are some statements of facts which may be questioned by other authorities, for example, the one referring to *Bacillus coli*

as a non-motil organism possessed of flagella. It is generally recognized that the greater number of varieties of this bacillus are motil, although less actively so than some other forms. Another unfortunate feature is the fact that special methods, which have appeared during the past two or three years, are generally omitted, while many of those contained in text-books are given.

In the description of the pathogenic species of bacteria, there is a lack of precision and uniformity of expression which are necessary for a student to easily comprehend the morphology and the essential and characteristic cultural properties of the different organisms. The illustrations are good, and many of the chapters, such as the one on immunity, are excellent. The very broad field covered in this book renders the omission of a discussion of many valuable and important topics a necessity. For this reason it is not a satisfactory text-book on technic, a complete manual of pathogenic bacteria, or a comprehensive treatise on pathology. It is doubtful if there is a need in our medical schools for a book of this kind. The author has, however, covered very well the ground intended to be discussed, and succeeded in making a very happy combination of parts of three great subjects.

## OBITUARY RESOLUTIONS.

WEST END MEDICAL SOCIETY, NEW YORK CITY.

OCTOBER 3, 1896.

IT is with deep regret that we learn, at this our first meeting of the year, of the death of our esteemed fellow member, Dr. Edward S. Farrington, who died on September 7th of typhoid fever.

He was a man of fine character, scholarly attainments, and attractive personality, and was held in high esteem by all who knew him.

We feel that by his death both the Society and the individual members thereof have lost a valuable associate and a good and loyal friend.

We hereby resolve that these our expressions of regret and appreciation of our loss be spread upon the minutes of this Society, and that copies thereof be transmitted to his family and to the current medical journals.

CYRUS J. STRONG,  
HOWARD GILLESPIE MYERS,  
CHARLES GOOD,  
EDWARD L. WILLIAMSON,  
Committee.

## OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM SEPTEMBER 22, 1896, TO SEPTEMBER 28, 1896.

Captain Norton Strong, Assistant Surgeon, relieved from duty at Fort Sheridan, Ill., and ordered to Chicago, Ill., for duty as Attending Surgeon and Examiner of Recruits in that city.

First Lieutenant John S. Kulb, Assistant Surgeon, is relieved from duty at Fort Walla Walla, Wash., and ordered to Vancouver Barracks, Wash.

Captain William Stephenson, Assistant Surgeon, is relieved from duty at Vancouver Barracks, Wash., and ordered to Fort Sheridan, Ill.